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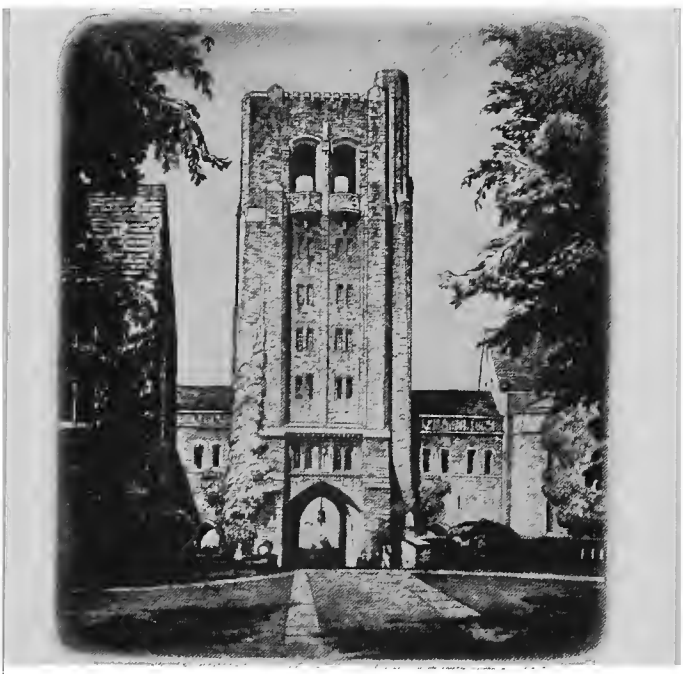

RAILWAY CORPORATIONS AS PUBLIC SERVANTS


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RAILWAY CORPORATIONS AS PUBLIC SERVANTS

BY

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To

BROOKS ADAMS

AT WHOSE SUGGESTION

THESE LECTURES WERE UNDERTAKEN

This Work is Inscribed

WITH THE ESTEEM OF THE

AUTHOR

PREFACE

THIS work contains the substance of a course of lectures delivered in May, 1907, at the Boston University School of Law. It is, to some extent, supplementary to a previous work on "Restrictive Railway Legislation," as it describes the development of such legislation since the passage of the Act to Regulate Interstate Commerce. The treatment of the subject is, however, more particularly directed to an amelioration of the existing relations between railway corporations and the public whom they serve.

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RAILWAY CORPORATIONS AS PUBLIC SERVANTS

CHAPTER I

THE NATURE OF A PUBLIC SERVICE

It is my purpose in this course of lectures to discuss the relations of Railway Corporations as Public Servants; to consider how they are affected as to their rights, powers, privileges, and obligations by reason of the duty which they owe to the community from being engaged in a public service. In the prosecution of this purpose we may first ask ourselves, What is a public service?

In its broadest aspect public service may be defined as a service performed for the general welfare of a community. The foundation of public service is in the claim that each individual in a community should contribute to its welfare as a whole in the preservation of its entity, in the protection of its organization from dissolution. So far as such service is not exacted by superior force, it is not expected of any one beyond his capacity for undertaking it, and he is only benefited

through the maintenance of the sovereign power in its integrity. The service may be rendered in property or in person. That which most generally affects property is taxation for the support of government, but the most general service of a personal character is military service. This service is required in the rudest form of a community, in a tribe of savages. The tribe is not concerned in the disputes of its members nor in their family feuds. These they are left to settle among themselves. It is only in the preservation of the body politic from assault that the tribe as a whole is interested. Military service is the primary obligation of a public character, and those who render it are public servants to the fullest extent.

The welfare of each tribal community was believed to depend upon the will of its tutelar deity, and therefore the propitiation of that deity was an obligation essential to its prosperity. Divine worship accordingly became a recognized public duty. In all communities these have been the earliest forms of public service, that of general defence and that of general worship; the one being obligatory upon all able-bodied men and the other upon the members of the community in general. In the course of time these services were delegated to special classes of public servants, to professional soldiers and to professional priests, who performed them for the benefit of the rest of the community. Therefore the rest of the community were expected to provide

from their own property for their support, and this was the beginning of specific compensation for service of a general character.

We must come well down into prehistoric times to find any other form of organized public service, to the early stages in the civilization of the two peoples first known as nations. Babylonia and Egypt depended for food upon irrigated crops. As the population increased under the protection afforded against external enemies, the construction of dikes to preserve the fields from overflow and of ditches to draw the water away became an undertaking of magnitude beyond the means of individual cultivators, and the control of the irrigation works became a public service in the valleys of the Euphrates and the Nile. Although the welfare of the whole community was involved in this service, it was assumed that as the farmers were more directly benefited by its performance, they should bear the cost. As it was a period anterior to the invention of money, they were required to pay the cost in kind by compulsory personal service. This form of forced labor, the corvée, was in fact the concentration of the personal capital of each member of a special class in the community for the performance of a public service beyond the means of any one of them as an individual.

As Babylonia and Egypt continued to flourish and were brought into communication with each other, the development of their commercial interests also

induced a public service in their behalf. Caravans of asses and of camels made their toilsome way across the Syrian and Arabian deserts burdened with precious commodities which made them the prey of the nomads who lay in wait for them. Only under armed escorts could the desert passage be safely accomplished, until it was made to the interest of the chieftains of these marauding tribes to furnish the protection themselves for an agreed compensation. The protection of caravans in transit became essential to the conduct of international commerce and was a peculiar service, inasmuch as it was rendered by one class of individuals to another at the expense of the persons for whom it was performed. It was the origin of a public service in the interest of transportation in which the compensation was not paid to, but by, the carrier. The amount of the compensation was roughly graduated according to the perils to which the commodities were exposed and to their supposed value, and, as there was no coin in circulation, it was paid in kind, as a toll. This is a point of especial interest, as in the imposition of tolls there is the germ of a principle of great economic importance. I refer to the increased value imparted to a commodity by its transmission from a point of production to a point of consumption, and to the just division of the profit accruing from its sale to the consumer, as between the several parties engaged in its production and distribution.

Another opportunity was afforded for the application

of tolls to commercial transit where the highway was intersected by rivers too deep to ford. At such places, boatmen offered their services on terms which fluctuated with the condition of the stream and with the needs or means of the wayfarer. The profitable business of the boatman attracted the attention of the owner of the riparian rights, and he either tithed the fares or leased out the privilege as a monopoly, — an early example of the grant of the right of eminent domain in the public service of transportation.

In this service of transportation two factors are involved, — the carriage of persons and commodities and the maintenance of the highway over which the service is performed. The protection of caravans from pillage was one way of maintaining an open highway, but for ages the maintenance of the thoroughfares was not a public service. Transportation was altogether by beasts of burden, and the highway was merely a trail. Minor repairs were done to it by passing travellers, and it was put in some sort of order as an army marched over it. Only as the Romans became lords of the civilized world were there any paved roads, and these were on military routes radiating from the imperial capital. To this day fragments of these are in existence, and bridges which carried them over the streams are still in use. They were constructed at the imperial cost and maintained as a provincial charge, but there seem to have been no specific tolls paid by the persons using them.

In the social disintegration which accompanied the dissolution of the Roman Empire, commerce in the ordinary sense had ceased to exist, except by sea. Each individual community became of necessity self-supporting and the only public service was that which its members rendered to its feudal lord, whether baron or abbot. The country fairs were the only markets and the lord of each castle that overlooked the highway exacted toll from the passing merchant. As kings began to coerce their barons into allegiance, there was a diminution of this thinly veiled form of robbery, and an increase of commercial transit which compelled the recognition of the maintenance of the highway as a public charge. In England, this burden was thrown upon the parishes, which sought to perform it by a resort to the corvée, to compulsory labor of the adjacent farmers. These were reluctant to perform a service for the benefit of wayfarers from other and remote communities, and the device of turnpike trusts was conceived by which the means for the construction and maintenance of highways was obtained by a resort to tolls; not as in ancient times for protection against pillage, nor as in the feudal period as a mere exaction, but as compensation paid for a specific service by the person directly benefited to the party by whom it was rendered, and here begins the actual genesis of transportation by land as a public service.

The growth of inland commerce enabled it to pay

tolls sufficient to maintain highways traversable by wheeled vehicles, and there ensued a division of the functions of production, transmission, and distribution of commodities for sale within the realm. The producer no longer transported his own wares to market, and there came into being a new factor of transportation in the carrier of goods for hire. The community as a community, however, concerned itself but little with the common carrier. The only notice taken of him was in the determination of his disputes with his customers, which in England became the basis of a distinct branch of the common law in the law of common carriers.

In the meantime, another factor in social economics had been evolved from the capricious exercise of the sovereign power in England in the grant of monopolies by letters patent to royal favorites. These grants were in many instances valuable privileges for the exclusive production or sale of certain commodities, or for trading with certain foreign countries, or of territorial ownership in newly discovered regions of which the sovereignty had been assumed by the kings of England. Many of these grants required an investment of capital beyond the personal resources of the grantees, who associated others with them in special partnerships for their exploitation.

In the formation of these special partnerships is to be found the earliest plan for the concentration of many

small sums of money into an organized project for the accomplishment of a purpose beyond the means of most private individuals. In pursuance of this purpose, the lawyers combined a feature of the Roman civil law with respect to associations of individuals with the English common law view of corporations created for public purposes. The persons composing a special partnership were considered as incorporated into a single body created by a charter from the Crown, endowed with certain privileges and burdened with certain obligations which did not pertain to the members of the partnership as individuals. They were mortals, and their property was subject to their debts. This corporate body was immortal, and its assets were not subjected to the liabilities of its component members. Their investment in its capital was divided in shares of equal value that passed by assignment of the share certificates.

The opportunity thus afforded for the investment of small savings, and this application of the principle of incorporation to the furtherance of commercial undertakings, originated a new era in the economic history of Europe; especially in England and in France, in connection with the funding of public debts at a lower rate of interest. By placing the capital so concentrated in the control of a few directors, the impecunious promoter was enabled to enter a field of finance that had been before occupied only by men trading upon their

own resources. About 1719 two schemes of this character were undertaken almost simultaneously by the South Sea Company in London and by Law, a Scotchman, in the formation of the Mississippi Company in Paris. In both projects, the prospect for great profit from the concession of exclusive trading privileges in remote regions beyond the seas appealed to the desire for speculation that is ever present in mankind. The South Sea Company declared a dividend of 30 per cent and guaranteed one of 50 per cent for twelve years. The shares of the Mississippi Company were quoted at prices which placed the total value of its capital stock at one hundred and eighty times more than the entire amount of money estimated to have been in circulation then in Europe. The success of these companies induced the flotation of others, which fed out shares to the growing appetite for speculation until the inevitable catastrophe ensued.

The collapse of this vicious stock gambling did not affect the value of the principle of incorporation for legitimate purposes, and such a purpose was presented within fifty years after the first financial crisis due to excessive speculation in the stock of incorporated companies. It arose in connection with the application of steam-power to manufacturing purposes in England. The rapid growth of these industries incited a corresponding increase in the output of the collieries upon which they depended for fuel, and the matter of getting

coal from the collieries to the factories became an important item in the cost of production. A network of canals was the basis of the transportation system, but the intermediate haul from the collieries to the canal-boat was the point at which there was experienced the insufficiency of horse-power exerted over an inferior roadway.

Here invention overcame difficulties. First, the roadway was improved by flat longitudinal timbers to support the tread of the wagon wheels; then the timbers were plated with iron; then these plates were made with a flange turned up on the outer edge to keep the wheels on the track, and finally, by a real inspiration of genius, the flange was transferred from the track to the wheel; and the modern railway was born. On one of these colliery railways the attempt was made to utilize steam-power, and after successive failures, the locomotive appeared as the necessary adjunct to the railway. The means of transportation which had been devised to meet the requirements of the coal miners were then applied to the general needs of the country, and a new kind of public service was thereby created.

As the advantages of this mode of public carriage were made manifest, attention was drawn to the opportunities that it presented for profitable employment of capital in large amounts. Here was a field for the exposition of attractive enterprises in which the spirit of speculation was reinvigorated. Schemes for the construction

of railways were devised in such numbers that zeal outran discretion in their propagation. They were projected on parallel routes in close proximity to each other, as many as eight separate schemes having been incorporated for the construction of railways in one narrow valley. The competition between rival companies began before the work of construction had commenced. In the committee rooms of Parliament, opposing solicitors wasted the money of shareholders as generals would have shed the blood of their soldiers on the battle-field. The law of corporations was fundamentally modified by statutory enactments in the passage of acts for chartering railway companies. Railway shares took precedence of all other media for speculation on the stock exchange. Shares in inchoate projects were oversubscribed and sold at a premium. In one year as many as thirteen hundred projects were brought out, calling for capital to the amount of 600,000,000 pounds sterling. Then came the collapse. In 1848 the railway bubble burst. Inflated shares vanished in the bankruptcy courts. The clamor of the Stock Exchange was silenced, and lawyers no longer grew wealthy in practice before parliamentary committees. The savings of thousands of people with small incomes and of humble wage-earners had furnished the means for this speculative revel, and they were left in penury. In a primitive tribe, individuals had been free to fight among themselves; as, at a later period, the feudal barons ex-

ercised the right of private warfare. Now, in this advanced stage of civilization, the State did not intervene in the ruinous competition which arose between the corporations engaged in the application of improved methods of transportation to the welfare of its constituent members. Such was the first experience in the evolution of a new kind of public service in Great Britain.

Railway transportation was introduced on the European continent after its essential character as a public service had been clearly demonstrated in England, and it was, from the beginning, treated as a function of government which might be delegated to incorporated companies as a concession from the sovereign power, to be exercised under proper supervision. In the United States, the spirit of individual enterprise was as dominant as in Great Britain, and private capital was in control of the railway system before its profound influence upon the public welfare had been generally appreciated. The first railroads were projected contemporaneously with the earlier colliery lines in England, and merely as adjuncts to mining enterprises. Horses were employed for traction except where stationary steam-engines were used on inclined planes, and experiments were being made with locomotives before they had displaced the same modes of traction on the English railways. The evolution of railway construction and operation was therefore but little affected by English practice, and accordingly developed in con-

formity with the peculiar conditions of its environment.

Here was a people occupying the fringe of a continent for over a thousand miles. As soon as they had released themselves from the fetters which bound them to a hated suzerain beyond the ocean, their energy was directed to the exploitation of the vast estate which was now their own. The sea furnished them with easy means of communication among themselves and with their transatlantic kinsmen, but there was scarcely a stream along this stretch of coast that was navigable into the interior for a hundred miles. Westward of this young republic there was a region unequalled in the North Temperate Zone for natural resources and for facilities of internal communication by water. From the time of the first discoveries in this region as colonists they had shed their blood in contests with European monarchies for its possession, and they had but recently acquired by purchase the last claim of this character to dominion over it. But even with the removal of this last political barrier there still remained a great natural barrier between them and their new acquisition of territory, — a range of mountains that ran parallel with their own coast.

The Atlantic States being dependent upon the sea for intercommunication, they had developed independent commercial centres at the ports of Boston, New York, Philadelphia, and Baltimore, which were rivals for the

trade of the Northwest Territory, lying beyond the Alleghany Mountains and the Ohio River. There was one break in this range of mountains which was accessible by a navigable stream, the Hudson River, and the first great enterprise for providing artificial means of communication with the Northwest Territory was undertaken in the construction of the canal from Albany to Buffalo. Philadelphia was spurred on to communication with the Ohio River by artificial waterways connected by inclined plane railways over the mountains, operated by stationary engines. Then it was that certain far-sighted citizens of Baltimore projected the construction of a continuous railroad through the passes of the Potomac River to the Ohio, a distance of four hundred miles, before the practicability of locomotive traction had been successfully determined on the Liverpool and Manchester Railway; and the first railway in the world that was originally projected for operation by locomotives was constructed in 1828 to 1830 from Charleston, S.C., to Augusta, Ga. From this time forward there was an incessant rivalry between the principal cities on the Atlantic Coast in the establishment of railway communication with the Mississippi Valley regions. Boston built a road across the mountains to the road which has superseded the once valuable Erie Canal; and secured an all-rail connection for the traffic of the Great Lakes, while New York was still relying on the Hudson River for obtaining the same

traffic. Philadelphia abandoned its mixed water and rail line to the Ohio at Pittsburg for an all-rail line. Baltimore had completed its project in competition for the same traffic, while the more southern of the Atlantic cities were fostering similar enterprises; and by 1850 the railroad mileage of the United States equalled that of all the rest of the world.

The effect of the introduction of steam railroads upon the general welfare of this country soon exhibited the importance of this new branch of the public service. In 1820 there were half a million people in Ohio, and half as many more in the remainder of the old Northwest Territory. By 1830 this population had doubled, which was largely due to the opening of the Erie Canal. By 1850 the influence of railroad communication became felt in that region. The population of Ohio had doubled in twenty years, and in the same time had quadrupled in the other States that had been organized in the Northwest Territory. In the next decade, when the whole of Ohio had been supplied with railroads, the population of that State had increased but 15 per cent, while the increase of over 220 per cent in the same decade in the other States in the Northwest is a striking illustration of the service performed by the continuous extension of railroads in opening up their fertile lands to immigration. A general view of the progressive increase to the present time in the population of this whole Northwest Territory is even more impressive. The

area which in 1830 supported but 1,500,000 people contained in 1900 a population of 16,000,000.

Similar results followed upon the further extension of the railroad system through the region beyond the upper Mississippi River. The population of Iowa and Minnesota increased from 200,000 in 1850 to 4,000,000 in 1900, and that of Kansas and Nebraska from 130,000 in 1860 to 2,500,000 in 1900. The population of the Rocky Mountain region, which was less than 100,000 at the earlier date and was only about 200,000 in 1870, was quickened into more vigorous life by the construction of the transcontinental roads, and forty years afterward, in 1900, had increased twelvefold. The southern part of the trans-Alleghany region was well provided with navigable streams and less dependent upon artificial means of communication. The influences of slavery and of the Civil War were adverse to the rapid extension of railroads in that region until 1870; but since that date to 1900, its population has nearly doubled, and the number of white people there at the latter date was one-third more than the total of both whites and blacks in 1870. Texas affords a more remarkable example of the effect of railroads on the growth of a State; for its vast area of 265,000 square miles is scarcely penetrated by navigable streams, and possessed a population of but 800,000 persons in 1870, which by 1900 had increased to 3,000,000, of whom four-fifths were whites.

I have entered into these details in order to impress

upon you the magnitude of the public service which has been performed by the railways of the United States. The most important conclusion to be drawn from them is that it has been of a character quite different from that rendered by railways as a means of communication in European countries. There they have proved of benefit in replacing communications of an inferior kind for the transmission of traffic already existing between populous communities. In the United States they have provided means of communication where there were none before save Indian trails. Here they have peopled an almost unpopulated continent, and have created prosperous States out of a wilderness. Our railroads have also performed another and most valuable public service to the overpeopled regions of Europe in relieving them of their surplus population by transferring them into the interior of our own country for a thousand miles and more; there to establish themselves in comfort by providing food for their kinsmen remaining in their native land. In the half century ending in 1906, 23,000,000 immigrants entered this country by sea, and the States founded in that period in the Mississippi Valley have been largely peopled from that source. All these developments which I have recounted would have been impossible without railroads, and it is because of the unique conditions under which this system has been here developed that the relations of the railroad corporations to the people of the United

States as public servants bears but little analogy to the similar relation of railroads in other countries. It is to a consideration of those relations as affecting their public service that I propose to devote my subsequent lectures.

CHAPTER II

THE PUBLIC SERVICE OF A RAILWAY

In my introductory lecture I adverted to the essential character of a public service and to the ascription of this character to services rendered at first between private individuals, but which later assumed an importance that affected the general welfare. The conditions were indicated under which the burden of a public service which had been placed upon the carriage of goods and persons for hire had devolved upon steam railways; a system of transportation that had been rendered possible by the concentration of capital in corporate bodies. Finally, I dwelt upon the effects upon the general welfare which followed the development of railway transportation in the United States.

I shall now consider more specifically the character of the service performed in railway transportation. That service is, of course, the carriage of goods and persons for hire. But is it the same service that was rendered by the common carrier and by the stage-coach proprietor whom it has superseded? In a general way it *is* the same service, but rendered under

different conditions. The railway company not only owns and operates its own vehicles; it owns and maintains the highway over which those vehicles are operated, and it monopolizes the use of that highway. Furthermore, this monopoly is not exercised by an individual, but by a corporation which derives its being from the sovereign power recognized by the community in which the service is performed. And yet again, the construction of its highway has only been made possible by a further grant from that sovereign power in the delegation of its right of eminent domain; that is, by its fundamental claim on each individual in the community for a contribution of personal service or property in preservation of its entity.

What, then, are the obligations of a railway company? Primarily, it is a public servant because it offers to carry goods and passengers for hire. Again, it possesses a monopoly of the means for performing that service over its designated route. It has acquired that monopoly indirectly through the intervention of the sovereign power in its behalf, and, finally, it only performs its accepted service at all by permission of the same sovereign power to which it owes its very existence. The relation of a railway corporation as a public servant is therefore dual; in part with the sovereign power as to that which affects the general welfare of the community, in part with each individual to whom it renders the service of a carrier. The claim

upon its service which is of a public character is not based upon the duty of each member of the community to contribute personal service or property for the preservation of the body politic, but grows out of the service that it may be required to render to the members of that community.

So it has been with all applications of inventions and discoveries to the benefit of mankind in the use of illuminating gas, of electric telegraphs and telephones and lighting, in the production and transmission of electric force, and, with this experience to guide us, we see the same results foreshadowed in the transmission of signals by the so-called wireless telegraph. In the experimental stage their ultimate effects are imperceptible. They are utilized as occasion is afforded for individual purposes. By degrees their use is extended and becomes more profitable to the persons who hold a monopoly of such inventions or discoveries, until, at last, that monopoly is exercised by a corporation and its use becomes so general that it develops into a public service. In the performance of a public service, the corporation obtains in some way a delegation of the sovereign power, and, as a consequence, generally enjoys more privileges than it is burdened with obligations. This statement is true of any specific service rendered by a corporation. The service is not performed for the general welfare indiscriminately, but for certain individuals who can

be identified and who pay the price for the service. With them the relation is personal and private, yet, because it *is* a monopoly, because the welfare of a majority of the members of a community is affected by it, and because, for that reason, the sovereign power has been more or less invoked for its performance, the private and personal relations of a corporation are recognized as matters affecting the general welfare, and the corporation becomes a public servant. Although in some respects the distinctive features of this dual relation may be clearly defined, in others the relations of the corporation with individuals become indefinitely merged into its relations with the community in general.

The germ of the obligations of a railroad corporation to the community in general is to be sought in the early charters from the Crown. In its essence the charter was a grant of privileges, a license to the grantee to do certain things which he could not otherwise do lawfully. The obligations assumed under the charter were the rendering of some service to the Crown in return for the grant and the observance of certain restrictions in the exercise of the privileges granted. The more important of the privileges of this character which were afterward embodied in railway charters were sheltered under the delegation of the right of eminent domain. For instance, the company's agents might enter private property without

permission in the discharge of their recognized duties, and yet without being subjected to suits for trespass, but the company became responsible for any damage that resulted from such entry. The company might construct its works across the King's highway and across navigable streams, but with due regard to the use of such thoroughfares by the community in general; and it might even occupy private property permanently with such works without the consent of the owner, but only for the purposes and within the limits of the route defined in its charter and after due compensation for the same had been tendered.

The obligations of a railroad corporation to private individuals, as a carrier, have their sources in customs antedating our information as to their origin. These customs became the basis of judicial decisions in controversies with respect to such obligations before the organization of joint-stock companies under statutory acts; and the granting of chartered privileges had passed from the Crown to Parliament before the invention of railways. The first acts which authorized the private ownership of a public thoroughfare referred to the construction of canals. In these were included the privileges which had before been granted to turnpike trusts and the previous provisions relating to tolls as well.

The first applications for railway charters were in the interest of colliery owners. Coal had been carried

over wooden tramways from the mines to the canals for a century or more. Where it was necessary to pass over the lands of other owners, the privilege of transit had been secured by obtaining what were termed "way-leaves." The profitable growth of the coal traffic heightened the demands for compensation for these "way-leaves." The colliery owners then conceived the idea of converting their tramways into public highways, like the turnpike and the canal, and thereby to exercise the right of eminent domain in obtaining the "way-leaves" on reasonable terms. To secure this privileged invasion of private property, it was requisite that the function of the tramway should be assimilated to that of a thoroughfare. This was accomplished by providing in the charter for the use of the tramway by shippers of coal from contiguous mines upon the payment of toll.

Thus was brought about a twofold use of the same facilities for transit. In one respect they were utilized for the private purposes of the owner; in another the tramway was private property dedicated to the use of a certain class of individuals in the community, upon the payment for such use by the persons who used it and in proportion to the use that each of them made of it. In consideration of the benefit that thereby accrued to the community in general, the State had delegated to a corporation the privilege of exercising its own right of eminent domain, and in

return for this grant, the tramway company consented that the State should fix the terms upon which its property might be devoted to a public service. Here is the origin of the contract relation which was embedded in the grant of the right of eminent domain to chartered companies; that in return for the grant the company's property should be charged with a public service, and that the compensation for the service should be regulated by the grantor of the exclusive privilege which was the party that had itself created the grantee, the other party to the contract.

Although the transportation of coal was the purpose for which the chartered tramways were intended, there was also a carriage of other commodities and of persons that was incidental to that purpose, which exhibited the value of tramways as improved highways for the general purposes of the community. The experience thus acquired induced the incorporation of railway companies for such purposes, rather than as an adjunct to collieries. One of the earliest of such companies was the Stockton and Darlington Railway Company, projected in 1821 for the construction of a railway twenty-five miles in length. So far from being recognized as an enterprise contributing to the general welfare, it met with much opposition, and the act of incorporation was not passed until 1823. It was on this railway that George Stephenson experimented with steam locomotives. By the substitution

of steam for horse-power as a tractive force upon railways, he made the most important change in the means of transportation by land since camels replaced asses in caravans on desert routes, and he thereby introduced a factor into the intercommunication of communities that has profoundly affected commercial and social relations throughout the world.

The introduction of locomotives made it necessary that the motive power should be placed exclusively under the management of the railway company, although private wagons are still hauled in the company's trains, loaded with minerals, which are the property of the owners of the wagons. The general carriage of persons and goods was, however, conducted directly by the railway company. The charges before collected at turnpikes from goods, wagoners, and from stage-coach proprietors were merged with the compensation paid to them by the persons for whom the carriage was performed. Tolls and fares were superseded by freight and passage rates, and the last step was taken in the combination of the private service rendered by the common carrier with the public service of the turnpike trust or the canal company. I have been particular in describing the gradual development of railway transportation as a public service, because each step in that development should be recognized as a foundation-stone of the basis of any system of State regulation of railway corporations,

if substantial justice is to be done in the exercise of the sovereign power for that purpose.

I will cease for the present to pursue the further course of railway transportation in England, and will direct your attention to that which more immediately concerns the subject of these lectures, — the evolution of railway transportation in the United States as a public service. Although there had already been a private use of tramways to a very limited extent, the first incorporation of railway companies in this country followed upon the English experience as to the adaptability of railways for general purposes. Their character as public highways was clearly expressed in their acts of incorporation. The charter of the Baltimore and Ohio Railroad Company was framed with a view to the use of horse-power, and included provisions for the transit of private vehicles on payment of tolls, but the introduction of locomotives soon made it manifest here, as in England, that the railway company should be made solely responsible for the entire transportation service over its lines.

The legislation with respect to railway companies, however, followed a different course. England was already provided with highways and canals which were considered as adequate means of communication for the general requirements of its population within its comparatively restricted area. The new mode of transportation seemed mostly to benefit the owners

of collieries and the shippers of merchandise. The owners of landed estates were hostile to railway construction, and, through their control of Parliament, they made the granting of charters contingent upon the exaction of extortionate prices for the right of way. Each project was treated as a separate proposition for the invasion of private rights for the profit of railway shareholders, and the general welfare was disregarded in railway legislation.

The social and economic conditions which prevailed among the people of the United States, and their remarkable physical environment, induced as decided a departure from English practice in railway legislation as in railway construction and operation. The proposition usually presented in the application for a charter was not the substitution of one means of communication for another, but the construction of a highway where none had before existed. It was not a matter in which there was a conflict of class interests, but one that secured the support of every member of the community which expected to be benefited by its success. A kindly feeling was also inspired toward each of such projects by the rivalry that existed between the several cities on the seaboard for the traffic with the interior country. Boston and New York competed for the business of the Erie Canal and the Great Lakes. Philadelphia and Baltimore became interested in rival lines to the Ohio River.

Charleston and Savannah each had its own scheme for building through the barren pine forests to the fertile regions of Middle Georgia and Alabama. It was not so much with the hope of personal profit that these rival enterprises were projected, as in the desire for the advancement of the general welfare. The public service which the railways were to perform in building up the commerce of the cities by developing the agricultural and mineral resources of the interior country was the prime consideration in all the legislation affecting them. Their projectors were to be helped and not hindered in the prosecution of their work, and it was more important that their charters should attract subscription to their capital stock than that either private or public rights, which were not openly invaded, should be specially protected.

With the further extension of railway construction into the Mississippi Valley, more general interests were concerned. It was no longer the commercial prosperity of cities that was involved, but the creation of sovereign States, and as the effect upon the growth of Ohio became manifest, the newly organized States beyond its borders were eager to further railway construction within their limits by any legislation that would accomplish it. Donations of right of way and of station grounds were made by individuals, not as an easement, but in fee simple. Promoters wrote their own charters. Freedom from taxation,

unlimited powers as to routes or branch lines, exemption of employees from jury and militia duty, — almost any privileges that they asked for were granted.

The profit to the shareholders in railway companies was not yet shown, and the demand for capital in the ordinary business of the country exceeded the supply. It soon became evident that railways could not be constructed by private subscriptions alone, and their projectors looked for aid from the communities that were to be benefited by them. The earlier schemes were for the commercial advantage of their respective seacoast termini; and the merchants, who could not spare the necessary capital from their business, were quite ready to support an appeal to the public authorities in their behalf. The city of Baltimore was the principal subscriber to the original stock of the Baltimore and Ohio Railroad Company, which was subsequently dependent upon the State of Maryland for the completion of the enterprise. Once that the way was shown to the exploitation of public credit in aid of railways, private subscription became rather a basis for corporate organization than the means for construction. Promoters presented the merits of their schemes in the lobbies of city council-chambers and of legislative halls, and dwelt upon the public benefits that would ensue upon their completion, rather than upon the pecuniary profit to be expected from investment in their shares.

The desire for railway communication became epidemic. It spread from the seaboard into the interior until it reached the thinly populated regions in which its benefits were no longer to be conferred upon commercial cities, but upon agricultural communities, and the farmers were quite as willing as the merchants had been that railway enterprises projected ostensibly in their interest should be nourished in their infancy from the fount of public credit. So the good work went on until the iron rails were laid across the Alleghany Mountains into the States beyond their western slope. Here the borderland of civilization had been reached. Millions of acres of fertile land lacked but the plough and the seed to gleam with ripening grain. The ploughmen were slowly creeping in by wagons, but the price of the grain grown in those regions was absorbed in getting it to market, and the farmers could only plant for home consumption.

From this dilemma the way of extrication was pointed out by the promoter, who stood ready to come to their relief. In the broad prairies that stretched toward the horizon of the setting sun there was a mine of potential wealth, which might be made available as a basis of credit for railway construction. No sooner had this proposition been advanced than it was sedulously propagated as a political measure. These unoccupied lands were a public domain, the property of the people of the United States before the existence of the States

within whose borders they were situated. Congress had already granted a percentage of the proceeds from the sale of these lands to the recently organized governments for the improvement of their public highways, and the fund thus created had been made the security for loans obtained abroad for that purpose. But the means thus procured proved insufficient for results of any magnitude, and now Congress was petitioned to grant to the State governments the public domain within their respective borders in aid of internal improvements. Under this scheme of appropriation, the interests of all were harmonized, and politicians, people, and promoters worked to a common end so successfully that, beginning about 1850, the public domain within the jurisdiction of the organized State governments was rapidly divided among them. Then there arose a contest between promoters before each legislature for railway charters containing grants of the lands which were now the property of the State. It was shown that by granting one-half of the area that would be made accessible by the construction of a railway, the other half would be given a value that would warrant such a gift to an enterprise which was owned and controlled by a private corporation. The field was broad, the harvest was ripe, and the promoters were many. Projects were conceived in fraud, and carried through by corruption, even by barefaced bribery; but there did result from this appropriation of the public lands a

rapid and general extension of railways throughout the region east of the Mississippi and the lower Missouri rivers.

Within this region the federal government had given no direct aid to the construction of railways. It had not even officially recognized their existence, except for postal service, until the era of the Civil War. Then an act was passed to secure intercommunication between the lines of the companies operating under State charters for more efficient coöperation in the matter of military transportation. But the first direct association of the United States government with railway construction was also indirectly a consequence of the Civil War.

The population of the Pacific Coast was too far removed from the scene of warfare to feel a very lively interest in the political issues that had disrupted the Federal Union. They took but little part in the actual conflict; they did not relish being saddled with the burden of taxation that it laid upon them, and they virtually refused to use the legal tender currency as money. The ties by which they were bound to their kinsmen in the Eastern States were attenuated by distance. They had acquired substantial prosperity in the exploitation of their own mineral resources and in commercial intercourse among themselves, and their political horizon was becoming contracted within the western slope of the Coast Range of mountains and the Pacific Ocean.

It was the prevision of wise statesmanship which recognized the necessity for closer social communication with these isolated members of the Union. This could be accomplished only by railway construction on a far greater scale than had as yet been attempted, and the problem was beset with difficulties, political, financial, and physical, which made it difficult of solution. From the Missouri River there was for thousands of miles a wilderness untenanted save by wild Indians and by trappers equally as wild. It offered no such basis for financing a railway corporation as had been afforded by the fertile lands of the Mississippi Valley. Only on its eastern border was it fringed by prairies. For the remainder of the distance it was a succession of sterile deserts and of inaccessible mountain ranges which would have rendered railway construction difficult and costly under the most favorable conditions, and which, as the situation was actually presented, appeared insurmountable. So it was a public work, and its consummation might have been indefinitely deferred with serious political consequences, if the desire for its accomplishment had not been aroused in the minds of a few private individuals and its undertaking stimulated by the prospect of personal gain. The magnitude of the enterprise excluded the probability of its construction with private capital. The interior region to be traversed was largely unexplored, and a grant of lands so little known and for the most part sterile was

not an attractive basis for inviting the coöperation of capitalists. The only remaining prospect for securing that coöperation was in direct financial support from the federal government.

As soon as there was a prospect of aid from this source for a transcontinental railway, several projects were presented for approbation. They were over routes as far apart as the northern and the southern boundaries of the Union, and were enthusiastically supported by the communities in which their respective eastern termini were to be situated. The rivalry engendered between these different projects added to the difficulty in procuring government aid for any one of them, until a scheme was devised for subsidizing them all with land grants and the loan of United States bonds, to be made available as the work of construction progressed on each. Confidence in the national solvency had not yet been securely reëstablished, and, even with such aid, it was not immediately practicable to obtain the necessary capital from the foreign financial centres, where alone it could be procured in the amounts that would be required. Nor could contractors be found that were both able and willing to undertake the construction of a transcontinental line over thousands of miles of deserts and mountains without reliable data to guide them as to the character of the work or the cost of performing it; in fact, where nothing was certain except the perils and hardships that were to be encountered.

The several corporations that had secured aid from the federal government for building over their respective routes were brought to a standstill by the difficulty of obtaining capital and contractors for their work. Then the men who had been instrumental in the formation of the Union Pacific Railway Company determined to undertake the construction themselves. They accordingly formed a company which entered into a contract with the railroad company to build the road under the terms of its charter, receiving its assets as compensation. This was a hazardous enterprise in which they risked their fortunes, but they entered upon it with energy. They overcame difficulties that were as formidable as they were unexpected, and this first transcontinental railway was completed with marvellous celerity. But for the manner in which the company's assets were utilized, and the unfaltering determination of the capitalists who conducted the work to a successful termination, the completion of the railway that thereafter bound the Pacific to the Atlantic Coast might have been delayed until the fears were realized of the statesmen who foresaw that closer association between them was a political necessity.

The errors as well as the success of the builders of the first transcontinental railroad made the way easier for the construction of those projected upon the other routes. The Rocky Mountains, which had increased the difficulties and the cost of construction, were found

to be rich in mineral resources that attracted population to a territory otherwise uninviting, and that materially added to the prosperity of the country at large; so that State after State was organized out of this intervening region, which must long have remained a wilderness, but for the legislation that provided a financial basis for the construction of railways through it as national highways, and but for the courage and intelligence of the men who undertook them as private enterprises.

If I have enlarged disproportionately upon the conditions under which the transcontinental railways were projected and constructed, it is because I look upon the results as perhaps the greatest public service that has ever been rendered by private corporations. With their completion, the framework of our national railway system became definitely outlined. It only remained to fill in the interior network. This had been going on, it is true, throughout the period in which the Pacific railways were under construction, and with a rapid annual increase of mileage, that culminated at about the time that the first trains ran through from the Pacific Coast. Up to that date, the service that had been so far rendered by railroad corporations to the people of the United States had been gratefully recognized in legislation by municipal, State, and federal governments for their benefit. The changes which immediately ensued, and which have been far-reaching in their consequences, will be discussed in the next lecture.

CHAPTER III

THE PUBLIC BENEFITS CONFERRED BY RAILWAYS

In my last lecture I dwelt upon the valuable service that had been rendered by railway corporations to the people of the United States, and upon the public recognition of this service as exhibited in the legislation concerning them. I intimated, in conclusion, that a change had taken place in popular opinion upon this subject about the time of the completion of the first transcontinental railways. To the causes and effects of that change of opinion I propose to devote this lecture.

It is to be remembered that the railway system which by 1880 had increased to ninety-three thousand miles, although controlled entirely by private corporations, had not been constructed altogether by private capital. Public aid had been liberally granted for this purpose. Statistics are not available for ascertaining the respective proportions of public and private funds that had been invested in the construction of that railway system under the original charters. Perhaps it is below, rather than above, the actual proportion if I should state that, directly and indirectly by subscriptions, loans, guarantees, endorsements, and land grants, the cities, counties,

States, and federal government had contributed one-half of the actual cost of the railways, as originally constructed, up to say the year 1870. In but few instances had the donors acquired any pecuniary interest in the resulting profits of the enterprises to which they had so liberally contributed. In many cases the security for loans, guarantees, or endorsements was subjected to prior liens or subrogated, by legislative assent, to subsequent loans in some financial crisis of the debtor corporation.

Neither had the honest application of the aid thus rendered been provided for by the admission of official representatives of the grantors to the boards of directors of the railroad corporations. The share which they were to have in the enterprise in return for the public funds invested, the character of the securities on which loans and guarantees were made, the manner in which the money was to be expended, the purposes to which it was to be directed; all such considerations were subordinated to the one absorbing motive for granting the aid, the desire to have a railroad built. No conditions entered into the act of incorporation nor into the subsequent legislation in its aid as to the character of the work of construction. Even the route and termini of the line were but vaguely designated. All else was left to the honesty or to the cupidity of the men who had the corporate power. If the original cost per mile of most of the railways constructed prior to 1880 in

the United States was far below the average in other countries, it was not only due to the generally favorable topography of the country, to the abundance of excellent building material, to the low cost of the right of way, and to the capacity and skill displayed by the constructing engineers. This low average was in as great measure due to the adoption on most of this mileage of heavy grades and short curves to reduce the cuts and fills, to the scant cross-section of the road-bed, to the inferior timber in cross-ties, bridges, and buildings, to the unsubstantial foundations of bridges and of trestleworks, and to the use of cheap rails of light sections. This kind of railway construction was not chargeable in any considerable degree to the intentional dishonesty of the railroad managements. They had a difficult problem to solve, — to build a road with insufficient resources, to make the best possible show with the means at their disposal. They based their estimates of the amount of capital required for the realization of their projects upon insufficient data as to the cost of construction, and entered upon their enterprises without knowing where the capital was to be obtained for prosecuting them to completion. As a consequence, it was characteristic of our railway system in the primary stage of its development, that it was neither planned for economic operation, nor constructed with a view to a low cost of maintenance. Almost every railway company lacked a proper equipment and relied upon its

current earnings to provide for what were called betterments, but which really belonged to the original cost of construction. The system of railways that rested upon this frail financial foundation did not fulfil its promise either as a profitable investment or as an efficient public service. With but few exceptions, stockholders ceased to expect dividends, and the management resorted to temporary expedients for the fulfilment of their pecuniary obligations. In their struggle to maintain the credit of the corporation, they drew upon its gross earnings to such an extent as to leave no surplus for betterments, and even the necessary repairs to the property were deferred until its degradation became more and more apparent, and reacted directly upon the efficiency of the corporation as a common carrier.

This state of affairs affected public opinion unfavorably in two ways. The expectation of profitable returns from the investment of public funds in railway enterprises had not been realized, and, as the corporations failed to meet the interest on their bonded debt, their creditors began to call upon their guarantors or endorsers to respond to the obligations that they had assumed. The revulsion which ensued in the popular feeling toward railroad corporations became intensified as their growing inability to pay their debts culminated in confession of bankruptcy. Then the resulting pressure upon State and city governments brought home

to their constituents the magnitude of the obligations that had been so lightly undertaken. The politicians who had been so swift to hail the promoters of railroad projects as public benefactors now, in self-defence, charged their successors in the corporate management with deception and fraud. As already stated, there was but little ground for such accusations either against the promoters of the earlier railroad corporations or against the persons in actual authority at the time of the financial catastrophe. In general they had acted in good faith. The capital stock in private hands was for the most part distributed in small amounts. The directors were usually business men, prominent in their respective communities, and the managing officials served the companies to the best of their ability upon meagre salaries. The promoters had been mistaken as to the cost of the undertakings which they championed, but they did not profit personally by the public aid that they procured.

The opportunity for self-aggrandizement by fraudulent representations was afforded when the public domain was opened to spoliation in aid of internal improvements. It became the prey of lobbyists and demagogues who secured a railroad charter with a land grant or a bond loan or State endorsement, and then found a purchaser for it. When the crisis came, these harpies had disappeared and had left their successors in control of the corporation to bear alike the financial

burden and the personal odium which they had escaped. Popular indignation was heightened in many instances by the discovery that the property which had been supposed to be ample security for the public funds invested in it was pledged, also, for previous loans for which it was even an inadequate security; and that a burden had been placed upon the public treasury for the payment of interest and principal of bonds for which the State would receive nothing in return. A ready ear was then given to suggestions of repudiation of the debt incurred under fraudulent misrepresentations, and a disregard of public integrity was added to the political hostility that had been aroused by lending the public credit to private corporations engaged in rendering a public service.

The change in popular feeling was imparted to the legislation affecting railway corporations. Applications for charters were closely scrutinized, and requests for especial privileges were refused. The exemptions from taxation enjoyed by many of the corporations that had been the recipients of liberal aid were looked upon as unjust after the burden upon other property had been made heavier by reason of the failure of such corporations to comply with the terms under which the aid had been granted. It seemed unfair that the railroad company, as reorganized in the interest of its other creditors, should still enjoy this privilege at the expense of creditors who had been excluded from the benefits

of the reorganization. It followed that any attempt of one of these reorganized companies to obtain even the slightest amendment to its charter was met by a demand for the surrender of its special exemption from taxation. This change in public opinion began with the financial depression of 1873, when the reduced earnings of the railroad companies coincided with the deteriorated state of their property, — two unfavorable conditions which reacted on each other and upon the service which the corporations rendered to the public.

Indeed, the character of that service had been profoundly affected by the very extension of the facilities for performing it. The considerations that controlled the traffic policy of the respective railroad corporations were clearly defined so long as their lines were either unconnected or were linked together as parts of independent systems, each of which converged upon some one commercial centre. But as the ramifications of two or more of these systems became intertwined, a new principle began to control the service as common carriers, — that of competition. There was a double motive involved in this competition. From one point of view, the competitive policy was in the public interest; that is, it extended the field of influence hitherto occupied by the commercial centre which had been instrumental in securing the construction of the railroad upon which it depended for its trade. It also gave the people of the interior access to

more than one principal market. But while the extension of local systems within separate fields of influence had served to swell their net earnings with the increased volume of traffic, the competition of rival lines in the *same* field was more effective in reducing the net earnings of both than in increasing the traffic of either. This effect became more marked as the competition began to lose its purely commercial character. As the desire for profit became subordinated to that for retaliation, the competing corporations were no longer rivals, but enemies. Under the guise of public servants they engaged in private warfare, in which they wasted their revenues and hastened, if they did not originate, the corporate ruin which brought them into popular disfavor.

The policy of unrestricted competition affected public opinion adversely in another way. Each of the rival lines was as sedulous in maintaining its revenues from non-competitive or the so-called local business, as it was indifferent to deriving profit from competitive or through business. Its policy with reference to any particular traffic was determined by a single consideration, whether it was local or through; that is, whether the point of shipment or delivery was within or without the field in which it was securely intrenched. Outside of their own breastworks, the rival corporations battled for the favor of the public, regardless of profit; within their own lines, each conducted its traffic with a view to profit alone.

Thus there arose a marked difference between the character of the public service rendered where competition was possible and where it was impossible. In the field of competitive traffic, railway corporations performed their duty as common carriers to the best of their ability for the public benefit. In the field of non-competitive traffic each performed that service primarily for its own benefit. Undoubtedly, commerce in the one region was more highly favored than in the other, and dwellers in the non-competitive region believed that the greater prosperity in the other region was due to the favoritism of the railway corporations. Thus the current of popular opinion, already heated by the untoward consequences of public aid, was envenomed by the injection of another and more virulent infection of animosity.

The increase in the burden of taxation which had originally brought the railway corporations into disfavor was general in its application to other classes of property, and its incidence upon any particular community could not be definitely indicated; but the burden of railway tariffs, of a specific charge for a specific service, was one which did not require a political economist to determine upon whom it fell. When the merchant or farmer at a local station found that it cost him double as much to get his shipment to or from market as it did some other person whose similar shipment passed beyond his station to its destination,

he required no additional evidence to confirm his belief that he was being treated unfairly by the railway company because he could not help himself. In every community in a non-competitive region, there was aroused a personal feeling of hostility which was directed especially against the company that was its sole dependence for railway transportation.

The indefinite disfavor into which railway corporations had fallen in public opinion was intensified by the introduction of this element of private and personal interest which found its vent in hostile legislation, not only to the railway company as a corporation, but also as a common carrier. Its relation to the public in that capacity had been mainly defined in judicial decisions applicable to particular cases, and it was found difficult to devise statutory remedies for the wrongs arising out of the competitive policy which would meet the approval of those communities that were profiting by its application to their own commercial interests. Different remedies were proposed in different States, varying in purpose and in administrative machinery with the nature of the public feeling that dominated the legislation. In the States where the ramifications of rival systems had become so extensive as to leave but little non-competitive territory, the element of personal interest was so far lacking that the relation of the railway as a public servant was treated in the abstract as a matter in which the dedication of

private property to a public service should be based upon a proper recognition of the rights and obligations of both parties in the passage of a general railroad law. In other States, the balance of public and private interests was overborne by prejudice. Public opinion was diverted from a determination of the proper relations between the State and railway corporations to the regulation of the service rendered by them as common carriers, and the manner in which that service should be performed in non-competitive regions was made a political issue. The demand for a regulation of this service became more especially concentrated upon one point, — the reduction of rates in those regions. When this proposition was submitted for legislative action, it was found difficult to fix railroad rates by statute. After protracted and fruitless discussions and some futile legislation of that character, the regulation of rates was in many of the States delegated to a commission. It was also found difficult to define the field of action of these commissions, and the difficulty was evaded rather than removed by endowing them virtually with plenary powers.

While the current of popular opinion had carried legislation along from the definition of the corporate privileges and obligations of a railroad company to the regulation of their compensation as common carriers, the railroad managements were persisting in

the policy which had brought this legislation upon them. There was no effort for concerted action to devise remedies or alleviations for the grievances which were arousing public opinion. Where competition was possible, their rivalry increased in the reduction of rates, so that there was an increasing discrimination against the non-competitive regions. Occasionally the managers would come to an agreement to raise competitive rates to a higher scale, which was but a hollow truce under which competition did not cease, but was merely obscured. The agreed rates were ostensibly maintained upon all traffic subject to competition, but exceptions were secretly made in favor of shippers whose business was of sufficient consequence to secure such favoritism. This was a new plan of competition within competition. The discrimination between communities was accompanied by a discrimination between individuals in the favored communities; a discrimination the more unjust because it was concealed. It was also the fruitful parent of petty corruption and occasionally of gross fraud on the part of the agents engaged in making these secret contracts and in the payment of rebates.

So the course of unrestricted competition held its way, heightening public indignation in the non-competitive regions and making new enemies in the competitive regions of shippers who were suffering from this secret discrimination. The net revenues of the

railway companies were being continuously depleted and their financial stability undermined, until many of them were swept over the precipice of bankruptcy. By the beginning of the decade of 1880, over one-fourth of the railway mileage was in the hands of receivers. Only the corporations which occupied the principal routes of commerce had escaped this fate, and few among them were operated with profit. On their passage through bankruptcy, the control of the railway corporations had, in a great measure, been transferred from the stockholders to their mortgage creditors, and the management of their interests was concentrated in the hands of trustees.

The decade of 1880–1890 may be called the Renaissance of the railway system of the United States. It was a period of dissolution followed by one of reorganization. The fragmentary sections of continuous lines of communication were recast in homogeneous organizations resting upon substantial financial foundations. Not only was the railway system reorganized; it was rebuilt. In a previous course of lectures delivered in this school, I referred to the coincidence of this period of reorganization and reconstruction, with the general introduction of Bessemer steel as a structural material, and I likened the consequences to those which followed upon the introduction of bronze into the civilization of prehistoric times. This is not the place to dwell upon these con-

sequences longer than to mention that the greater durability and cheapness of this metal for rails and bridges have been prime factors in the reduction of railway rates, which has so largely conduced to the development of our national resources. The generally improved condition of our railway system was then due, as I have stated, to the coincidence of its reconstitution financially with the introduction of new means for its improvement physically, and this combination of means resulted in an improvement in the public service of railroad companies which, to an eminent degree, promoted the welfare of our country.

The reorganization of our railway system not only resulted in an improvement in its capacity for rendering a public service and in reducing the cost of that service; it also secured a more intelligent appreciation of the policy under which that service should be conducted. The change in ownership had brought about an expectation of profitable results, for which the managers were held responsible in a much higher degree than ever before. The reorganization had tended to consolidation, by which competition had been neutralized in many regions of former bitter rivalry, and, in those regions, the rates on what had now become non-competitive or local traffic were raised into better alignment with the rates in adjacent territory that had never been a field of competition.

This solution of the problem of the relative ad-

justment of competitive and non-competitive rates encountered general dissatisfaction. It ended the payment of rebates to persons who had thereby grown wealthy, and it instigated them to secret antagonism. It deprived certain interior commercial centres of advantages which they had long enjoyed from corporations whose rivalry had ceased with their consolidation, and the newspapers at those centres eagerly championed their claims for the continuance of the former discrimination in their behalf. At the same time, the people at the intervening local stations did not appreciate that their situation had been relatively improved. They did not want injurious and unjust competition abolished by raising rates in the former competitive regions, but by lowering them in their own. This view of the matter was impressed upon the minds of the members of the railroad commissions, who were dependent upon public favor for continuance in office, and who, indeed, in some of the States, had been put there to accomplish this very purpose. Where this had been the case, they went about it in a summary way. They simply recast the local tariffs on a lower basis, without regard to the effect upon revenue. This brought about litigation in which the railroad companies were defeated in the State courts, and eventually in the federal courts, to which the cases were appealed on points of constitutional law.

The power of the States to regulate the rates upon

railway traffic within their borders had been firmly established, but the victory of the people over the corporations was not yet complete. It now became evident that the State commissions were unable to regulate the rates upon interstate traffic. The railroad companies were still at liberty to compete without restriction for that traffic, and they continued to exercise that freedom at the junction points of the reorganized systems. But they exercised it with a discretion born of bitter experience. They had learned that a reduction of rates at those points attracted business away from adjacent non-competitive stations, with loss to their revenue. The rival corporations therefore agreed so to adjust their tariffs on interstate traffic as to diminish this disparity, and thereby to protect their local business from being drawn into the vortex of competition. An observance of these tariffs was secured by an agreement to divide the revenue from competitive traffic at each junction point upon an acceptable basis between the lines that were rivals at that point.

Wherever these so-called "pooling agreements" were observed, in good faith, the result was beneficial to the corporations that were parties to them. The merchants at the adjacent stations were able to retain their legitimate business, and those at the junction points were protected from unfair competition amongst themselves, as all paid the same rates. But this

state of affairs did not suit the larger dealers and manufacturers who had before been the recipients of secret advantages in special rates and rebates that enabled them to undersell their smaller rivals. As the State commissions were powerless to interfere in the regulation of interstate commerce, the railway corporations were charged with entering into combinations for the application of extortionate rates upon interstate traffic; though the pooling agreements had only to do with maintaining published rates on competitive traffic. Combinations for such a purpose were not unlawful, but an active agitation was excited to make a national issue of the regulation of railway corporations as common carriers engaged in interstate commerce.

On this broader platform, the subject was discussed in an atmosphere that was freed of local prejudices, and the congressional committee rooms became the forums in which the opportunity was afforded for a full expression of opinion by those who advocated such regulation and by those who opposed it. When the reports of the committees were presented in Congress, the debates which ensued excited greater interest throughout the country than probably had ever been occasioned by any other issue which was neither partisan nor sectional. The subject was a novel one; the constitutional powers of Congress with respect to commerce between the States had hitherto been the

object of very little legislation, and the political leaders were disposed to enter very cautiously upon this untried field, lest the development of commerce should be unduly restricted or the needful regulation be rendered nugatory by a transgression of the limits in which it might be constitutionally exercised. So thoroughly was the matter debated that ten years elapsed from the time that it was first considered in committee until the passage of the Interstate Commerce Act in 1887.

This Act rested in principle upon the existing state of the law of common carriers as expounded by the federal courts. That which had been contained only in judicial decisions was now made part of the statute law. The only important addition which was made in this respect was the prohibition of pooling railroad earnings derived from interstate traffic for the purpose of dividing them among the competing corporations. Violations of the provisions of the Act were penalized with reference to the offending corporations and also their guilty agents; and there were minor regulations as to the publication of tariffs and as to passenger traffic. The Act further provided for its practical application by the creation of a commission which was independent of any of the administrative departments, as it reported directly to the President.

The field of interstate railway traffic had now been brought under federal control through the exercise by Con-

gress of its constitutional prerogative. It was a field far more extensive than any into which a commission of either of the States had entered, and the nature of the powers that had been delegated to the Interstate Commerce Commission were so indefinitely described in the Act as to give rise to doubts in the minds of its members as to the character of their duties and the extent of their authority. The primary purpose of the Act was the prevention of unjust discrimination between persons and communities by corporations engaged in the discharge of a public service as common carriers. It was necessary that there should be some authoritative declaration as to what would be considered unjust discrimination within the purview of the law, before it could be made applicable to particular cases. The general proposition, as laid down in the Act, was that there should be no difference in the compensation demanded of different persons for the performance of a transportation service of a similar character. This proposition was easy to state, but hard to define. Yet until it *was* defined so as to be clearly understood, the railway companies were without the information to which they were entitled in the adjustment of their tariffs to comply with the law, and the courts were without a basis on which to rest the application of the penal provisions of the Act to cases in which it was charged that they had been violated.

Considerable time was required for the organization of the work of the commission, and also for the preparation of the preliminary notices to the railway companies as to the publication of their tariffs and other detailed regulations which were specifically required by the Act. Meanwhile, the persons and communities that had been instrumental in the agitation for this legislation were impatient for results. They brought specific charges of alleged discrimination to the attention of the Commission and were granted hearings, at which the accused corporations were notified to be present and to state their side of the case. So long as the Commission had been engaged in the consideration of the essential nature of unjust discrimination, the railroad companies were quiescent, but as soon as it was proposed to apply its conclusions to concrete cases, they were aroused to action. They questioned the character of the powers delegated to the Commission as the members of the Commission had questioned it themselves; but the Commission had questioned it under the provisions of the Act, while the corporations questioned it under the provisions of the Federal Constitution.

It is unnecessary here to go into any considerable detail as to the objections raised by learned counsel which affected the very foundation of the Interstate Commerce Act. The more important of them, as experience proved, related to the exercise by an ad-

ministrative bureau of legislative and judicial powers. Could Congress delegate any part of its functions to a bureau of the Executive department? Could such a bureau exercise inquisitorial authority as a prosecuting agency in the detection of crime and also have its conclusions enforced as a judicial decree by the officers of the federal courts? These were questions which could only be determined in the courts themselves on issues definitely raised in particular cases. These cases were contested step by step from the hearings before the Commission up through the lower courts, until at length they reached the Supreme Court for its interpretation. But in each case, that court restricted its decision, as far as practicable, to the issues directly involved in the case on appeal; and frequently it happened that the appeal resulted in the case being sent back either to a lower court with instructions, or to the Commission for a rehearing. It was a slow process, and one which severely tested the patience of those who felt that their grievances remained in the meantime unremedied. Yet it was necessarily consequent upon the application of legislation in an untried field of such magnitude, and which was occupied by a conflict of complicated interests. By degrees the decisions of the Supreme Court dissipated the obscurity which had overshadowed the provisions of the Act and pointed out the way to their proper interpretation.

Under these decisions, when a railroad corporation resorted to the court in appeal from an order of the Commission, it was its right to have the case reopened from the beginning, to introduce new evidence and to apply for an interlocutory decree suspending the application of the order appealed from until the final determination of the cause. The Commission felt this restriction of its authority as exceedingly irksome. It asserted in its official reports that its efficiency had been destroyed, and its members gave vent to their personal views on the subject in public addresses, in newspaper interviews, and in magazine articles. An agitation for more efficient regulation of railway corporations was excited just at the time of a presidential election, and both of the principal political parties eagerly appropriated it as a campaign issue. It was again made the object of congressional investigation, and the committee rooms were once more the forums in which established facts and logical arguments were submerged under vague assertions of wrongs committed by the railway companies and under voluminous expositions of impracticable remedies for such grievances.

In this whirlpool of facts and fancies, stirred about by personal hostility and by political antipathy, there came to the surface two efficient factors in the general agitation. There was the commercial rivalry between communities in which it was believed that the railroad

companies exercised a baleful influence by unjust discrimination in rates, — a feeling which prevailed in important centres of distribution and in extensive areas of production. And there was a continuing assertion that the pernicious practice of rebating, once an accompaniment of unrestricted competition, had not been abolished with the extension of railway consolidation and combination, but had been converted into an engine of oppression in behalf of the industrial corporations which, under the opprobrious epithet of "trusts," were seeking to drive out individual competition in their respective lines of production. This particular matter had been legislated upon already by amendments to the original Interstate Commerce Act. The object of these amendments had been to secure evidence as to alleged violations of the law by granting immunity to persons who might have been incriminated by their testimony, and also to make it a criminal offence to receive a rebate as well as to offer one. It was the official opinion of the Commission, however, that these amendments had proved efficacious in diminishing the rebate practice to such an extent that it was no longer a crying evil.

The evil of unjust discrimination in rates, as affecting communities rather than individuals, had been held to find its refuge in the associations which had been formed to maintain rates on competitive traffic. Instead of leaving a free hand to each competitor, it was

asserted that the railway corporations had banded themselves into combinations to divide the competitive traffic of the country at large between these combinations, and that they sought to accomplish this purpose by so constructing their tariffs that traffic could not be profitably diverted from the routes agreed upon among them.

The Interstate Commerce Act prohibited agreements for the division of revenue from this traffic; therefore the railroad companies readjusted the constitution of their pooling associations so as to secure the maintenance of rates by other means. Subsequently to the passage of that act, public hostility to the dominancy of monopolistic industrial corporations or "trusts" had secured the passage of an Act of Congress known as the "Anti-trust Law," which forbade combinations in restraint of trade. The railway associations as reorganized for the maintenance of agreed rates were still the object of attack by the Interstate Commerce Commission. In a case against one of them, the assertion was made that this association was a combination in restraint of trade under the provisions of the Anti-trust Law. This view prevailed in the Supreme Court by a bare majority, and the decision of the court was made more disastrous to railroad interests by an expression in the opinion delivered from the bench that *any* agreement to maintain rates was a combination in restraint of trade, whether it resulted in unjust discrimination

or not. Under this opinion, it was unlawful for competing railway companies to agree to maintain any uniform rate, and the conclusion was inevitable logically that, if two railway companies *did* maintain the same rate, they did so by a combination, an agreement, or an understanding, which was in violation of the Anti-trust Law.

The effect of unrestricted competition had been to reorganize the companies thereby made bankrupt into larger corporations which sought to restrict competition within limits that preserved some measure of profit from the operation of their lines. The attempt to secure this profit by the division of the revenues from interstate traffic had been prohibited by the Interstate Commerce Act, and now it was forbidden by the judicial interpretation of the Anti-trust Law to establish uniform rates upon such traffic by agreement. It was impossible to foresee the effects upon the general welfare of the country that would result from a literal application of this view of the law to interstate traffic. And it was difficult to comprehend how the business of the country could be conducted under the diversity of rates that would necessarily follow. That it would result in a recrudescence of unrestricted railway competition was clear, and the effects of such competition in the past upon railway investments made it incumbent upon the managements of railway corporations to unite in some measure for the mutual protection of

the interests in their charge which would not be construed as a combination in restraint of trade.

After several tentative projects had proved insufficient for that purpose, a plan was adopted by which a community of interest should be created among corporations operating competing lines. This was to be accomplished through the medium of another corporation, not a railway company, but a financial company, which should exchange its stock for shares of the competing companies in sufficient amounts for it to acquire a majority interest in each of them, and consequently a controlling voice in the election of their boards of directors. By this plan it was hoped that the welfare of each would be the concern of all; at least so far as to restrict competition within reasonable limits.

This device of a "holding company" was tested in the courts in the case of the Northern Securities Company, and the ultimate decision was as directly against that mode of restricting competition as it had been against associations for agreeing upon uniform rates. It was held that a company chartered in one of the States to own stock in corporations engaged in interstate commerce was a combination in restraint of trade that was in violation of the Anti-trust Law. By this decision, the power given by the Federal Constitution to Congress for the regulation of interstate commerce, which had gradually been utilized to restrict the authority of the railway corporations over their own rates,

was extended to prohibit a financial corporation chartered by one of the United States from purchasing the shares of railway companies engaged in commerce between those States. This extension of the authority of Congress over the chartered privileges of a State corporation by judicial decree was attained about the time that the further exercise of the same authority over railroad operations was again made an issue of political importance in the proposed reconstruction of the Interstate Commerce Act, a matter which will be considered in the next lecture.

CHAPTER IV

THE PUBLIC BURDENS IMPOSED BY RAILWAYS

In the previous lecture, the gradual extension of federal authority over railway companies operating under State charters had been followed to the time of popular agitation for such amendments of the existing legislation as would provide more efficient remedies for the grievances under which the people in general were believed to be suffering.

The maladministration of the railway managements was no longer a debatable issue in the campaign of 1905. Its acceptance as a fact was the test that was applied to all candidates for political preferment. It was appropriated by President Roosevelt as a rallying cry for his nomination to office; and when he was reinstalled in the White House, he looked upon his overwhelming majority as a mandate that placed upon him personally the responsibility for providing efficient remedies for the ills that he had been denouncing. In the autumn of 1905, a discussion of this subject in the House of Representatives had resulted in the passage of amendments to the Interstate Commerce Act which were embodied in the Hepburn Bill. This was con-

fessedly a crude measure, accepted by the House with a consciousness of its incompleteness, in order that it might be sent to the Senate before final adjournment. The Bill was carefully considered in the Senate committee under the light thrown upon it by legal luminaries and under a fire of criticism from those who thought that it went too far and from those who thought that it did not go far enough, and on February 26, 1906, the committee reported the Bill in a revised form.

From the time of its introduction in the Senate, the discussion attracted general attention, in consequence of the magnitude of the interests that were to be affected by the result and of the excitement which had been aroused by the agitation of the subject in newspapers and magazines, in party conventions, and in political campaigns. The debate was not only memorable for these reasons, but also for the manner in which it was conducted. The subject was not treated as a political or a sectional issue, but as one on which each senator felt that all should unite for the general welfare. Such free scope was given to forensic ability that the Senate reëstablished itself in public opinion as an august council of statesmen, zealous in the public service, instead of being self-seekers subservient to monopolies.

This debate was memorable for yet another reason. Never before had the President of the United States made his influence so potent in the passage of a measure through Congress. As already mentioned, President

Roosevelt felt that he was acting under a mandate from the people, and he threw aside official reserve in his eagerness to secure a successful response to it. And what was even more remarkable, the senators in general accepted that view of his mission. His will was deferred to at every stage of the debate by representatives of each party, although as the measure was one on which both were united, any proposition on which they were in accord could readily have been carried through without concession to the President's views, and even over his veto. But the fact stands out prominently that the measure, as moulded in Congress, was more in the nature of an executive edict than of a legislative act. This was not due to a recognition on the part of senators of the President's superior grasp of the subject or of his aptness in the resolution of the difficulties by which its treatment was surrounded, but from a consciousness of his hold upon public opinion and the apprehension of the consequences of a rupture with him. This attempt to place before you the motives that actuated senators in this debate, and the conditions under which it was conducted, may help to a better appreciation of the arguments which served to modify the Hepburn Bill in its passage through the Senate and to give it the form in which it received executive approval.

The desire for amendment of the Interstate Commerce Act had grown out of the prevailing impression

that it had not produced the benefits that had been anticipated from it. The commission charged with the administration of its provisions admitted as much, but relieved themselves of responsibility by asserting that their efforts to carry out the law had been so restricted by judicial interference that they had been rendered virtually impotent. From their point of view, the ordinary procedure of the courts had been utilized by the ingenuity of able counsel for interminable delay in the application of the orders of the Commission to the redress of grievances caused by the acts of the railway corporations, and the ultimate interpretation of the powers of the Commission by the Supreme Court had restricted their field of action to that of an advisory board to Congress and of a detective bureau in the prosecution of cases arising under the Interstate Commerce Act.

This view of the subject was warmly espoused by the President, and under his influence the proposed legislation was directed to freeing the Commission from the judicial supervision that trammelled its action. The debate was largely devoted to the desirability of a special limitation of the authority of the courts over the orders of the Commission and to the constitutionality of the means suggested for securing that end. The discussion in the Senate over those features of the proposed legislation continued for nearly three months. It was difficult to devise a policy that would at once

satisfy the demands of those who wished to give the Commission a free hand, and yet would conform to the views of those who sought to preserve to the railway corporations such opportunity for litigating their differences with the Commission as would keep the powers of that body within the limits prescribed by the Constitution.

The Hepburn Bill permitted an administrative bureau to make orders affecting property rights without giving their owners the right to test, in a direct proceeding, the constitutionality of the Act or the lawfulness of the order, or even to challenge its legality in proceedings to confirm such an order, under a continuing penalty of $5000 per day. The discussion of the Bill was directed to the distinction between the judicial powers derived from the Constitution and the jurisdiction conferred on the courts by Congress; and mainly as to the prohibition by Congress of power to the lower courts to grant preliminary injunctions. The longer that the debate continued, the more indefensible appeared the efforts to deprive the courts in cases arising under the Interstate Commerce Act of the powers that they ordinarily exercised in other cases. Even the attempt to limit the field of judicial review was found so difficult to frame in satisfactory phraseology that it was at length abandoned, and the Bill was so amended as distinctly to affirm the jurisdiction of the courts to the satisfaction of those who had maintained it. On May 18, the Bill, which had become known as the

Railroad Rates Act, passed the Senate by a vote of 71 to 3. The House refused concurrence, and called for a conference. The conference committee substantially accepted the Senate amendments, and its report was adopted by the House by a vote of 216 to 4. On June 29, the Bill passed the Senate and became law by the approval of the President on the same day.

From the virtual unanimity with which the Railroad Rate Bill passed both houses of Congress, it may be assumed to meet the wishes of the country as to the necessary regulation of railroad corporations as public servants, and it is therefore worth while to examine its provisions in some detail in order to ascertain the respects in which experience in the operation of the previous legislation to regulate commerce had shown it to be defective, and the manner in which those defects had been removed.

The power of Congress to regulate interstate commerce was extended over all common carriers engaged in such traffic, including water lines. The definition of common carriers was made to cover all private car lines including sleeping cars, all pipe lines engaged in transporting oil or other commodities excepting water or gas, and also express companies. The definition of railroads was broadened to cover all switching, transfer, and terminal charges.

Common carriers were required to file with the Commission all through rates, including all charges for

special facilities of every character upon property transported. The initial carrier on a through bill of lading was made liable to the shipper for loss or damage on any part of the route, with the right of recovery from the carrier on whose line the loss or damage had occurred. The failure to file rates incurred a fine of from $1000 to $5000.

The provisions of the law with reference to rebates and discriminations whereby property was carried at less than the published rates were extended to the soliciting or receiving any valuable consideration as a rebate or offset against freight charges. Any corporation receiving or giving such a rebate was made liable to a fine of from $1000 to $20,000. Any person acting for the carrier in such violation of the law was, in addition to the fine, made liable to two years' imprisonment. Any act or omission of an employee was made the act of the corporation itself. A corporation convicted of receiving a rebate was liable to a forfeiture of three times the amount of such rebate received during the six years prior to the beginning of the action.

Railroad companies were prohibited after May 1, 1908, from engaging in mining or producing any commodity entering into interstate traffic, except for their own use. They were required to afford suitable connections to branch lines from mines or shops producing articles for interstate commerce.

The only important amendment affecting passenger traffic was a sweeping prohibition of free transportation to all persons except a carrier's own employees, by which any person giving or receiving an illegal free pass was made liable to a fine of from $100 to $2000. An amendment introduced in the Senate to require equally good service and accommodations for all passengers who pay a like amount of fare was stricken out in the conference committee.

The Interstate Commerce Commission was increased from five to seven members, and their salaries were raised from $7500 to $10,000 per annum. It was given power to fix joint rates and divisions of same, to establish through routes and to fix the conditions under which they were to be operated; also to compel detailed reports from common carriers as to capitalization, franchise and investment values, salaries, earnings, and profits.

All orders of the Commission, except as to the payment of money, were to take effect at any time after thirty days that the Commission might fix. Each distinct violation of such an order by a carrier or its agents was penalized by a fine of $5000. On complaint of a rate as being unjust, the Commission might fix a time for a hearing with due notice to the carrier complained of, and if the complaint proved to be well founded, the Commission was to promulgate the rate that it deemed equitable as a maximum rate, to be-

come effective in thirty days, and to remain in effect for two years, unless modified or set aside by the courts. If a carrier failed to obey an order of the Commission, any shipper feeling injured thereby was given the right to apply to a circuit court for its enforcement. Suits against the Commission to enjoin or set aside an order might be brought in the district where the carrier had its principal office. The Expeditionary Act of February 11, 1903, was made to apply to all such cases, including the hearing of preliminary injunctions. The Commission was empowered to award damages to a shipper for a carrier's failure to observe the law. Appeals to the Supreme Court were required to be made within thirty days, and were to have preference over all other cases, except criminal cases. In cases where a verdict was found in favor of a shipper, he was entitled to damages, cost, and reasonable attorney's fees.

The Act was to take effect sixty days after its passage, and the Commission, as reconstituted, set about its work with amplified powers and extended authority. The stringent penalties upon persons and corporations for acts of commission or omission, which were criminal because they had been made unlawful in the conduct of interstate traffic, remind us of the days when pickpockets were sent to the gallows; and it may be said that no other bureau of the federal government had ever before been endowed with functions that were so

intimately associated with the material welfare of the people. The power of Congress over interstate commerce had been delegated to the Commission to the utmost degree compatible with a technical deference to constitutional limitations. The authority of the Commission had been extended over the corporate acts of railroad companies outside of their duty as common carriers, and over the activities of corporations engaged in productive industries.

The mileage of the railway system of the United States is about 220,000 miles, capitalized at $14,000,000,000, with gross earnings of $2,300,000,000. It may help toward some adequate conception of the magnitude of this field in which the Commission is to exercise its newly granted powers and authority, if these enormous figures are compared with magnitudes of a different character. The total railway mileage of this country would girdle the earth at its equatorial circumference nearly ten times over. The capitalization of this mileage is one-eighth of the estimated total wealth of the United States, and six times the entire outstanding principal of its public debt; while the gross earnings from the operation of this railway system is over three times the total revenue of the federal government.

Too short a time has elapsed since the amended law for the regulation of interstate commerce was made applicable to this gigantic organization for any

valuable conclusions to be reached as to its general efficiency for the purpose for which it was intended, but its passage was contemporaneous with a disclosure of some phases of the rebate evil, which may be followed with a certain amount of interest, if not of profit, for the object which I have had in view in the preparation of these lectures.

The most objectionable form of discrimination by common carriers, the one most difficult to defend, and one which has given rise to intense hostility against railroad managements, is that of discrimination between individuals. It affects the very foundation of the public service performed by railroad corporations under the application of the common law to their obligations as carriers, and is an obvious abuse of the franchise for collecting tolls. It has been estimated by experienced railroad managers that the tribute paid in this way to individual shippers might amount to anywhere from $50,000,000 to $100,000,000 per annum.

The corporations themselves were not penalized for giving rebates until 1903, when, by the passage of the Elkins law, the penalties for discrimination between individuals were extended to apply to railroad companies as well as to their agents, by abolition of the penalty of imprisonment, by making the corporation and the receiver subject to the imposition of fines, and by making it sufficient in a complaint of personal

discrimination to show that a departure had been made from the published rate, instead of requiring proof that some other person had been charged a higher rate on a like and contemporaneous shipment. These additional provisions were thought to have had a very considerable deterrent effect upon rebating, and the Interstate Commerce Commission was of the opinion that rebates were well-nigh obsolete.

But the very object for which rebates were given and received could only be attained by methods that shunned the light of day, and which were therefore applied indirectly through agencies removed as far as possible from the personal supervision of the boards of directors of railway corporations. It was almost impracticable to secure a conviction of a corporation without the evidence of an intermediary subordinate, who protected his principal by an avowal that his testimony would incriminate himself. Subsequent legislation, however, granted immunity to witnesses so situated, and with this screen removed between the principals and their agents, the Interstate Commerce Commission could more readily follow up the indistinct and tortuous trail that connected the responsible giver with the receiver of rebates. The difficulties encountered in such investigations must have been formidable, for it was not until the latter part of the year 1905 that reports began to appear of the finding of indictments for giving and receiving rebates.

The road to conviction for rebators and rebatees was very much shortened by a decision rendered by the United States Supreme Court in March, 1906, in Hale *vs.* Henkel, known as the "Tobacco Case," as to the immunity secured to a witness in a criminal case by the Fifth Amendment; that this immunity was altogether personal and might not be pleaded in behalf of the corporation of which the witness was an agent, nor against a demand for the production of the books or other documents of that corporation. In short, that a corporation vested with special privileges and functions might not "refuse to show its hand when charged with an abuse of such privileges." The effect of this decision was made manifest in the "Sugar Rebating Cases" that were brought to trial in New York City in May, 1906. It was ascertained from the records of the indicted corporations that for years there had been a secret contract between the railway corporations, the refiners, and certain wholesale sugar dealers in the West, by which the refiners received from four to six cents per hundred pounds, and the purchasers five cents per hundred. The transactions with the refiners were concealed in lighterage charges paid to an intermediary corporation organized as a cooperage company. In the four months up to December, 1902, 70,000,000 pounds of sugar had been shipped under this agreement over one line, and the transaction was only brought within

the purview of the Elkins Act by a payment made on account about a month after the passage of that law. The payments were not made by checks, but by drafts of the bank cashier, which precluded identification; the records of the railroad company bearing upon the transaction could not be found, and the clerk who had kept the accounts had gone away on sick leave, to San Antonio, Texas. Despite these coincident misadventures and the efforts of the most eminent counsel in New York City, the several links in the chain of evidence were so closely reunited that all the defendants pleaded guilty. One of their counsel remarked that "it was impossible successfully to defend rebate cases in the present state of public opinion." In October and November, the shippers were fined $180,000, certain of the receivers $12,000, the railroad company $126,000, and its traffic official $6000; so that fines to the amount of $330,000 were imposed in these cases, with twenty-four indictments still pending against the same defendants.

Important as the Sugar Rebating Cases were in exposing the extent to which unjust discrimination in favor of a great industrial corporation had been carried on by one of the most prominent railroad companies in the country, and in the effect of the application of fines in amounts before almost unheard-of, these cases are but introductory to the judicial investigation of alleged unjust discrimination on even

a greater scale in favor of a more prominent industrial corporation, the Standard Oil Company, in which not one alone, but many railroad companies are involved. In August last, ten indictments, containing 6428 counts, were returned against that corporation in the United States District Court at Chicago. The violations of law in these cases do not seem to have been of the nature of a payment of rebates, but of unlawful concessions in the way of allowance for terminal charges.

It is to be noticed that these offences in favor of individuals lie outside of the field of the regulation of railroad rates. They are in violation of the common law with respect to carriers, which rendered them liable to claims for damages to other persons who were thereby discriminated against, and which have now been made criminal offences by federal statutes. It is to be hoped that the exemplary fines recently imposed upon conspicuous offenders will open their eyes to the immorality of their conduct, apart from the pecuniary loss to which they have subjected the corporations under their management; that they will no longer conduct their business on the presumption that a law is invalid when it unfavorably affects either the profits of their company or their own convenience. There is another lesson to be drawn from the developments in these rebate cases; that publicity is the best of all preventives of immoral conduct; that by letting

in the light upon the secret devices by which corporate power is applied to personal profit, there results a regeneration in the corporate policy as affecting the general welfare. This proposition is further exemplified by recent investigations made by the Interstate Commerce Commission, that have been rendered more searching by the increase of its powers and by the enlargement of its authority.

Under a resolution of the Senate, the Commission was instructed to investigate the relations of the railroad companies with the coal and oil industries. In this investigation, evidence was elicited as to the existence of undue discrimination in favor of individuals, not only by granting rebates, but also in rendering special facilities to certain coal companies in which the railroad officials were charged with being the recipients of bribes. These were not officials in the traffic department, but in the transportation department, who controlled the distribution of coal cars to the mines. This distribution was made upon the estimated annual output of the mines as determined by certain officials, and was put in effect by their subordinates. The extent to which any mining company could contract for future delivery depended upon the facilities afforded for shipment which were controlled by these men. In this field for temptation, shippers and car distributers secretly conspired for mutual profit.

An official of a coal company admitted to having distributed seven hundred shares in his company, valued at $35,000, to four railroad employees — a superintendent, a train master, a car distributer, and a clerk in the office of the superintendent of motive power. He explained that he gave away the stock to increase his facilities for doing business. A certain general superintendent had been given 1300 shares in seven different companies that paid dividends of 12 to 20 per cent. One of the superintendents admitted having received in this way stock valued at $40,000. A train master was in receipt of an annual income of $30,000 from coal stocks, and a road foreman in the locomotive department of $18,000. A more prominent official possessed stock valued at $307,000, for which he had paid nothing, and his clerk had shared in the same distribution to the extent of $38,000. A station agent at one mine had received stock valued at $67,000. A clerk on a salary of $125 a month had purchased stock of the par value of $75,000.

That favors from railroad officials were not too dearly purchased at such prices was shown in the results to one coal company, which in ten years had made a profit of 1656 per cent. The five coal companies specially selected for such favors profited at the expense of their rivals. One of these testified that during a period of unusually high prices for coal, when he could have used 60 cars a day, his supply was

nearly all cut off, while one of the favored companies was not only receiving 500 cars daily, but also had a reserve of 200 cars kept idle to provide for any accidental obstruction of its regular supply. He then bought 150 cars for his own business, but the car distributer included his private stock in the general distribution, although the 6000 cars of his competitor were kept out of that distribution. Another operator, who in 1900 had shipped 130,000 tons of coal, was only able to ship 3000 tons a month in 1904. He was forced to rent cars at six cents a ton from a coal company in which the railroad officials were interested, and eventually made an arrangement with that company to operate his mines for one-third of the profit.

Revelations of this character could not be disregarded by the corporate managements of the railroads whose transportation officials were exploiting their authority for their personal enrichment. In the board of directors of one of these companies, it was proposed to discharge every official and employee who had been engaged in these practices, when the board was informed that if such a resolution were strictly enforced, the transportation department would be so thoroughly disorganized that the business of the company would be paralyzed. But good came of the publicity given to this astounding state of affairs. It was agreed that the standard output of the mines should be fairly ascertained, that the proportionate distribution should be strictly observed and

be a matter of general information, that every railroad official and employee should be required to dispose of his stock in coal companies and be forbidden thereafter to acquire any interest in them, directly or indirectly. Let us hope, therefore, that this form of unjust discrimination on the part of railroad officials in favor of individuals may have disappeared without the necessity for legislation specifically directed to its punishment.

Discriminations in published rates differ essentially from discriminations in favor of individuals made possible by a departure from such published rates. Differences in the conditions and circumstances of carriage necessarily attach to the ordinary service of a railroad company. That service is made up of a multiplicity of single transactions, and if the compensation is to conform to the extent and character of the service, then the rate should be discriminatory accordingly, and theoretically there should be a specific charge for each of these transactions. Discriminations in rates is therefore essentially just, and both the common law and the statute law recognize that differences must exist in charges for railroad transportation. The difficulty in defining what constitutes unjust discrimination in rates is so great that it has been found impracticable to embody any definition in the law for regulating railroad charges that is of practical value. The general proposition as laid down in the original law for regulating commerce between the States is this, that there shall

be a like charge for a like service. But what is a like service? Strictly speaking, it is the carriage of a like quantity of a like commodity at the same time, between the same places in the same direction. One has only to have the proposition presented in this way to perceive that it is merely a standard by which to measure the deviation in any case from uniform conditions and circumstances, and that it has no practical value as a standard of justice in discriminations between published rates.

Congress has therefore intrusted to the Interstate Commerce Commission the application to particular cases of the principles of the common law with reference to unjust discrimination in the published railroad rates. In such cases two points are to be determined; first, whether the alleged discrimination be unjust, and, second, what is the relation between the rates complained of that would constitute a maximum just discrimination. As I have just said, it is recognized that rates must necessarily vary with conditions and circumstances. In determining the just relation between any two rates, all conditions and circumstances affecting the service, as well as the compensation, should have due weight, and, after this has been ever so conscientiously done, the determination at last of the measure of unjust discrimination is a matter of opinion. It is the opinion of the Interstate Commerce Commission against that of the railroad management; and

where their opinions disagree, it is well that they should be submitted for judicial decision. The opportunity is thereby afforded for presenting the facts and the inferences on which the conflicting opinions have been founded before a tribunal which, by induction from particular cases, will gradually evolve a basis of principles that will serve as a standard for the railroad companies that establish the rates, and for the commission whose duty it is to inquire into, and to determine cases of, alleged unjust discrimination in their application to actual transactions. If we resort to the courts in cases where conflict of opinion affects life and liberty, certainly we may resort to the same courts for final arbitrament in matters affecting the application of private property to a public service.

This course has been pursued in the past twenty years since the passage of the original act for regulating interstate railway traffic, and it is interesting to note the progress that has been made in the enunciation of principles that are definitely applicable to cases of unjust discrimination in published rates. Discrimination in rates are of widespread effect upon the commerce of great centres of distribution and of vast areas of production, and competition between such communities has been at the bottom of most complaints of unjust discrimination. The Supreme Court of the United States has recognized the right of the carrier to take into consideration the existence of competition as

a circumstance justifying a discrimination in rates, provided that the competition relied upon shall not be artificial or merely conjectural, but material and substantial; and it has secured a maintenance of such competition by its rulings in the cases of alleged combinations in restraint of trade.

The investigations of the Interstate Commerce Commission have been directed to discriminations in rates affecting not only the traffic of cities and States, but also transcontinental and intercontinental commerce. In these investigations, it has been ascertained that the competition of lines of steamships engaged in coastwise traffic was instrumental in the establishment of discriminating rates upon such commerce, and in order to prevent this competition from becoming unduly restrained by combinations controlled in the interest of rival railroad corporations, these water lines also have been brought under the provisions of the amended law for regulating rates on interstate commerce.

The Commission has not only been given power to hear and determine complaints of unjust discrimination in rates. It has also been authorized to determine the reasonableness of a rate in itself apart from any consideration of its relation to other rates. The exercise of this authority reaches the foundation of *making* rates as well as of regulating them. If the relative justice of discrimination in rates is largely a matter of opinion, an inquiry into the abstract reasonableness of

a rate in itself, apart from its incidental effect upon other rates, may be termed a metaphysical speculation. There is no *science* of rate-making, though there are several so-called theories, whose insufficiency is made apparent whenever they are applied to concrete cases. Here the regulation of a railroad company engaged in a public service touches the sources of revenue upon which the company depends, not alone for profit, but also for its solvency. Although I have alluded to the discussion of the abstract reasonableness of a rate as a field for metaphysical speculation, it is one which is so persistently explored for principles that are proposed as the foundations of practical railroad legislation, that the basis of rate-making cannot be disregarded in a consideration of the relations of railroad corporations as public servants, and this matter I propose to take up in the next ensuing lecture.

CHAPTER V

RECENT FEDERAL LEGISLATION

In beginning this course of lectures upon the Relations of Railway Corporations as Public Servants, I proposed to consider how they are affected as to their rights, powers, privileges, and obligations by reason of the duty which they owe to the community from being engaged in a public service, and for my present purpose I will briefly recall some of the propositions that I have presented in this connection.

The service in which railway companies are engaged has developed from the application of inventions and discoveries to the benefit of individuals, which has assumed public importance as, by its extension, it has come to affect the welfare of communities. Yet it is not a service performed for the general welfare indiscriminately, but is rendered separately to distinct individuals in specific instances. It is not rendered in the production or sale of commodities, but is the application of private property to a public use, in which the relations of the owner of the property so used with the individuals profiting by that use have become gradually merged into relations with the community in general, save in one essential respect. The compensation for the use

of the property is not obtained from the public purse, but from each individual to whom a specific service is rendered. This is a fundamental proposition in the relations of the railway company, not only with individuals, but with the community at large, which cannot be ignored in a consideration of the reasonableness of railroad rates into which I am about to enter.

I shall try not to be prolix, though an analysis of the cost of the service of transportation is not a matter to be accomplished in a few sentences. I hope, therefore, that you will not only listen with patience, but that you will also endeavor to keep pace with my line of argument. I am reluctant to deal in the abstractions of political economy, but since it has been proposed to apply them in the regulation of railroad rates, their efficiency as a standard for ascertaining the reasonableness of such rates may well be questioned before they are permitted to disturb the existing order of tariffs, to which the course of national and international commerce has become conformed in the practical development of railroad transportation as a public service.

In this consideration two factors are involved, — the nature of the service and the means by which it is performed. The service is the transfer of persons and things between places by land; the means are the stations of receipt and delivery, the roadway over which the transfer is made, the vehicles in which persons and things are transported, the apparatus by which the

transmission of the vehicles is effected, and the personnel engaged in the application of these several means of transportation to the service for which they are intended. The service rendered by a railroad company is then a combination of receipt, transmission, and delivery, and its responsibility in the performance of the service is likewise a combination. It is not uniform either in its application or extent. It varies as to distance and direction and as to the places between which it is performed. It is divided into the carriage of persons and of property, — two classes so distinct in their nature and as to the purposes for which transportation is sought that these give rise to entirely distinct obligations on the part of the carrier and to a marked difference in the character of the service.

The broad distinction in the duty of a carrier between the carriage of goods in a wagon and of persons in a coach has followed the transfer of both classes of traffic from the turnpike to the railway, and has been preserved in the legal definition of the difference in the responsibility of the railway company for the transportation of property and of persons, as to their receipt, transmission, and delivery. The fundamental distinction is determined by their inherent differences of quality. Commodities are inert and passive; persons are active and endowed with volition. While these facts, to some extent, diminish the responsibility of the railway company with respect to the transportation of

passengers, they introduce another element into that responsibility, since persons may be exposed to physical inconvenience and mental suffering.

The duty of the railway company in connection with the receipt or delivery of freight may vary with the nature of the traffic, — whether it be in light merchandise, or heavy articles, or dangerous commodities, or in bulky products of the fields, the forests or the mines, — and there is a distinction between its responsibility as a warehouseman and as a carrier. With the commencement of the service of transmission, the specific duty of the railway as a carrier begins. The character of that duty becomes greatly altered from that of the wagoner on the turnpike, because the highway as well as the vehicle is under the charge of the carrier. In the specialization of different classes of traffic there has been developed a necessity for adapting freight cars to such traffic, and its nature or volume may require especial care and attention, as in the peculiar facilities afforded for the refrigeration of perishable products; just as in the transportation of passengers there has been developed the special service afforded by sleeping cars. An important element in the responsibility placed by law upon the railway company is that it is made an insurer of the goods intrusted to its care.

The basis of a reasonable rate must therefore be affected by the character of the service performed, insomuch that rates of passage and rates of freight have

but little in common; while freight rates themselves should be modified according to the inherent qualities of the thing offered for carriage. The extent of the service has also to be considered, as in the distance over which a shipment is to be transported. It follows that the service performed by a railway company is of a more multifarious character than that rendered by any other agency of public utility. It is for the carriage of human beings, of dumb animals, and of commodities of many kinds, — of small and valuable separate packages, of car-loads of merchandise, of train-loads of lumber or coal, of grain in quantities to load a ship, — and all these myriads of separate transactions are for carriage between many different places and for as many different distances.

On what basis should the carrier's compensation be fixed, that it may be of reasonable application to each of these specific transactions? I think that if such a problem in the abstract had been presented to any set of legislators without our present experience to guide them, they would have been appalled at its magnitude and complexity, and would have pronounced it impossible of solution.

There is a theory favored by legislators and jurists that the compensation of a carrier should be based upon the cost of the service to *him*. If his compensation is to be based upon the cost of the service to him, then the means must be reckoned with that are utilized in its

performance. These means, as already stated, are the roadway, the vehicle, the motive power, and the personnel. The cost of the service should, therefore, include the cost of providing and maintaining each of these means which enters into the service of transportation. In carriage over the highway, this cost was divided between the community as to the roadway, and the carrier as to the vehicle, the horses and his servants. When the highway was maintained by the community, no part of the cost of its construction or maintenance was borne by the carrier, but when that service devolved upon a turnpike trust, the means for its construction and maintenance were obtained from the tolls collected upon the passage of each vehicle over the highway for definite distances between toll-gates.

The charge for the use of the highway was therefore fixed by a tariff of tolls for distance, over which the carrier had no control; and the cost to him was a fixed charge, proportionate to the frequency and length of his journeys. These elements also entered into the cost of repairs to vehicles and into the wear of horse flesh, but the element of time alone entered into the keep of his horses and into the wages paid to his servants. How was he to recoup himself from the service that he performed as a carrier?

If he was engaged in the letting of post-chaises, he could make a charge for each journey of a chaise according to distance, but would it be reasonable for

him to charge for the distance going and returning, when the traveller only used his carriage one way? Not if there was a certainty that it would be used in returning by some other traveller. But if it were merely a probability, then the carrier might reasonably add to the cost of rendering the service one way an amount sufficient to insure him against the loss contingent upon the carriage returning empty. The inclusion of this item of insurance, however, involves an estimate of the probability of such use of the carriage in returning, which makes the reasonableness of the amount of premium in this case a matter of opinion, and consequently affords a field for diverse views. There is another element which has not so far been considered in estimating the cost of a post-chaise service. It is the first cost of the vehicles and horses. This may be considered as an investment of a certain amount of money which might be borrowed at a certain rate of interest; and the annual interest money might be included in the total annual cost of service. But as both the vehicles and horses would become valueless from use in a certain number of years, there should also be included annually an amount sufficient to replace them both before that period had expired.

Assuming that all of the items that enter into the cost of the service have now been enunciated, we see that certain of them are matters of opinion, so far as they are affected by the probable frequency and length of the

journeys performed, and by the probability of the return journey being made by empty chaises. One consideration has as yet been ignored, the profit to the proprietor of the enterprise, which should undoubtedly enter as an element into any basis of reasonable compensation for the application of private property to a public use. Is that profit to be obtained merely by the addition of a fixed percentage upon the capital invested? If so, what relation should that percentage bear to the rate of interest that might be obtained from a similar investment amply secured? Should not an allowance also be added for the personal attention given by the proprietor to the conduct of the business?

After the cost of service and the amount of profit have been ascertained, how is the total compensation to the proprietor to be assessed upon the persons to whom the service is to be rendered? We will say according to the extent of use that a person makes of his property. Then, if the property was in daily use throughout the year, it would be possible to arrive at a reasonable charge for a journey by post-chaise, based upon the cost of service. But if the demand for the service were intermittent and irregular, the proprietor would receive no return from his investment while his property was idle. He could only be made safe by dividing the total annual cost of the service by the minimum number of journeys in the year, and, in that way, arrive at a reasonable charge for each journey. Here the element of

probability as to the number of journeys enters into fixing a reasonable rate, and again we find that what should be a reasonable rate is a matter of opinion, upon which the post-chaise proprietor and the traveller might well be expected to differ.

It becomes more difficult to utilize the cost of service as the basis of a reasonable rate in the case of a stage-coach line, where the coach is to run daily over an established route, and the compensation is to be collected separately from each person making use of its facilities. Here the number of journeys is fixed, and the cost of each journey may be approximately determined; but the coach must run whether it be empty or loaded, and, therefore, a reasonable charge should be based upon the average number of passengers daily each way. If a distinction is to be made between the fare of a through passenger and of a way passenger, based upon the relative distance travelled, there must be an estimate of the cost of the service per mile, and there must be a further average as to the number of through and way passengers respectively, and of the proportionate length of the journey of each way passenger. So that the element of probability enters more into the determination of the reasonable fare for passengers in a stage-coach than of the charge for a post-chaise, and the result is by so much more a matter of opinion.

The field for difference of opinion becomes materially widened in the attempt to arrive at a reasonable rate

for the carriage of goods by highway, based on the cost of service; service involving the use of a wagon and horses over a fixed route with their maintenance and the incidental expense of tolls and of loading and unloading the goods at the points of receipt and delivery. If the charge were to be made per wagon-load, the compensation for the service could be assumed in the same way as for the use of a post-chaise, but it is for separate shipments in a wagon that must go daily, whether heavily or lightly loaded, and in this respect the charge per shipment may be assimilated to the fare per passenger. But the shipments may vary as to the number of packages in each, and as to their size and weight; and this introduces another element into the determination of a reasonable rate for the shipment of goods. The rate should not only have reference to the distance that the shipment is made, but also to the relative difference between shipments as to the number, size, and weight of packages. The rate should, therefore, be fixed per package, and the additional factors, bulk and weight, should enter into the reasonableness of the rate for the use of the conveyance, so many pounds in so many cubic feet; and this test should be applied to the cost of service for each shipment offered for carriage.

In view of the argument as above stated, of what practical use is the cost of service as a standard in the determination *à priori* of a reasonable rate of transpor-

tation, even in so simple a matter as a post-chaise journey? — while in its application to the carriage of goods, the difficulties increase with the inclusion of other elements that affect the cost of the service. And when it comes to determining the reasonable compensation of a carrier by rail by the cost of performing that service, it is impracticable to assimilate the elements of that cost to those which enter into the cost of carriage over a turnpike; for the conditions under which railroad traffic is conducted are so very different that the apparent analogy between the two modes of transportation is but a semblance. The difference is fundamental, and lies in the fact that the carrier by rail is to be compensated not only for the use of his men and wagons and motive power, but also for the use of his highway.

The early carrier included the turnpike tolls in his current expenses, it is true, but that was a fixed charge which bore no relation to the cost of maintaining the highway. The carrier had invested nothing in its construction, and he cared not what might be the cost of keeping it in repair. But the roadway is the most expensive part of the costly plant of a railway company, and the interest on the money invested in its construction and the cost of maintaining it must enter as an element into any basis for fixing the reasonable compensation for the service rendered, as well as the cost of their vehicles and of their maintenance, and the wages of the employees directly engaged in the service of

receipt, transmission, and delivery, which constitutes the transportation service proper.

Suppose that we have ascertained the cost of the roadway and buildings of a railroad company, and have assumed that a certain rate of interest upon that cost, with the annual expense of their maintenance, should be included as elements in the compensation of the carrier, how could these items be distributed so as to include them in the cost of performing the service relatively to each trip of a vehicle, as with the carrier by highway? The interest upon the investment is based upon time, irrespective of the number of vehicles passing over the track, while the cost of maintenance is affected by the continual deterioration of the property from inherent qualities as well as from the wear caused by the passage of vehicles. We should also include the interest on the investment in the other plant dedicated to the service, the shops, cars, locomotives, tools, etc., the cost of their maintenance, and the wages paid to employees; and to this must still be added an annual charge sufficient to provide a fund for their replacement when they are worn out in service. When we have included all these items in a sum representing the total cost of the service, how is this total to be utilized as a standard for ascertaining the reasonableness of a rate of fare for a single passenger or the charge for the carriage of a single shipment of goods?

The principal factor in all transportation service is

that of distance. Apart from the interest on the capital invested in the plant, the cost of the service of transmission is mainly proportionate to the length of the journey, and in the transportation of passengers, it is the controlling element in the standard of a reasonable rate. Accordingly, all passenger fares are adjusted on a mileage basis. What should be a reasonable passage rate per mile? We may estimate interest upon the investment in vehicles engaged in passenger service, including locomotives, and of the cost of their maintenance, of the fuel consumed in moving passenger trains, and also the wages of employees, and thereby arrive at a sum that will represent the gross annual cost of the instrumentalities applicable solely to passenger service. Yet there is still the great investment in the fixed plant, in the roadway and buildings. The interest upon this investment also enters into the cost of the passenger service, but to what extent? for it is also utilized in the freight service.

This problem of the proportionate use of the fixed plant of a railroad company in the passenger and in the freight service can only be solved by the establishment of some relation between the two. It is difficult to find what may be called a suitable common denominator for the transportation of both a person and a thing; but such an one has become recognized by theorists, based upon distance and upon an assumed analogy of the carriage of a person to that of a ton of freight;

that is, that the service performed in the carriage of a passenger one mile is comparable to the carriage of a ton of freight one mile, and the terms "passenger-mile" and "ton-mile" are used as representing a like service of transportation, with respect to distance. Bearing this in mind, if we knew in advance how many passengers were to be transported over a railroad in a year, and the distance that each would travel, we could arrive at the total service in passenger-miles that would be required of the railroad plant in that year, and, in the same way, the total requirement of freight service in ton-miles could be ascertained. The relative sum-totals of passenger-miles and of ton-miles would furnish a basis for the relative use of the fixed plant in each of these distinct branches of transportation and of the relative proportion of the annual interest upon the investment in that plant that should be included in the cost of performing the service in each of the two branches.

Having obtained the sum-total of the cost of the passenger service, then by dividing into it the estimated passenger mileage, we would arrive at a rate per mile that would represent the average cost of transporting one passenger one mile. I say *average* cost, because there are other conditions and circumstances that affect the application of the cost of the service to a specific transaction besides that of the distance travelled by each passenger. The number of passengers travelling in one year, as estimated for, cannot be evenly

distributed throughout the year; therefore the trains must sometimes have less cars than the locomotive can haul, and more cars are usually provided in each train than are filled to their seating capacity; so that the plant is not worked up to its estimated capacity, and the percentage of loss per estimated passenger-mile from this cause must be included in the charge made to those who do utilize the service. Again, there is a difference in the character of the equipment of the cars and in the speed of the trains; so that it costs more to run some trains than it does others. You perceive, then, that, without presenting difficulties of a more detailed character, serious obstacles are encountered in the effort to apply the cost of the service as the sole standard for a reasonable passage rate. This argument might be strengthened by a more detailed analysis of the facts which I have advanced as premises, but I trust that what I have stated has been sufficient for you to assent to my conclusion that it is not only illogical in the abstract, but also impracticable to apply the cost of the service in railway transportation as the sole standard in determining the reasonableness of the compensation demanded for rendering a specific service.

You may well ask if there be no standard of a reasonable rate that is of practical value. Is the compensation to be left to the will of the railroad manager because we cannot ascertain the cost of the service in such a way

as to be applicable to each specific transaction? If this be so, on what basis can that compensation be regulated? I should feel that I had accomplished but half of my purpose if, after having devoted so much of this lecture to destructive criticism of an economic fallacy, I should not pursue the subject to an elucidation of my own views as to what does constitute a reasonable rate.

If I am to pursue this course, I must first ask what is meant by a reasonable rate? Reasonableness cannot be assumed of an abstraction; the very word implies a ratio, a relation between two or more propositions. In the series of lectures that I gave in this school on "Restrictive Railway Legislation," I defined reasonableness as a balance between conflicting interests, motives, or opinions, and these are the premises from which must be deduced the reasonableness of any relation between the persons that are influenced by them. What is the relation between a carrier and the person by whom he is employed? What are the interests and motives which respectively actuate them, and wherein do they conflict? The relation between the two parties arises from a common desire for the accomplishment of a certain purpose, the transmission between two points of a specified person or thing. The incentive is the advantage or benefit which each expects to derive from the accomplishment of that purpose, and if this incentive be lacking, either to the one or the other, there is no inducement for that party to take any step

toward the accomplishment of a purpose of which the other party is to be the sole beneficiary. Therefore, viewing the service of transportation in this light, as a contract relation, the standard for determining the reasonableness of the compensation demanded for rendering a specific service should include, as one of its elements, a recognition of the value of the service to the person for whose benefit it is performed as well as the cost to the person performing it. Two elements, then, should enter into the standard of a reasonable rate, — the cost of the service and its value. The cost is the lowest compensation that the carrier would accept; its value to the traveller or shipper is the highest compensation that he would pay. Somewhere between these limits there is a balance or reasonable adjustment of the benefit to each of the parties to the transaction. How shall this adjustment be so expressed as to assist in the determination of a reasonable rate for a specific transaction,—for instance, to the transportation of a single passenger?

There are several possible answers to this simple question. The one which I offer is as follows: As the cost of the service is based upon the average service rendered, so the rate to be based upon that cost as a standard should be an average rate for an average service. By this I mean that an average standard of service should be established as to speed of trains, character of equipment, and other conditions as to

safety, comfort, and convenience; that the number and frequency of such trains should be suited to the average requirements of the people in general, and that this service should be rendered at a fixed rate per mile per passenger.

I have here proposed to establish by law a fixed rate for a fixed service without including an estimated profit to the railroad company; and I have done so intentionally. An investment in railroad property bears but little analogy to an investment in a manufacturing concern. The capacity of an industrial plant is measured by its product, say in tons of iron or in yards of cotton fabrics per day or per year. Keep its machinery going, supply it with raw material, and the result in marketable commodities may be predicted with reasonable accuracy. But keep the machinery of a railroad going, and can any one predict the result in marketable products? Not at all; and why? Wherein does the profitable operation of a railroad plant to its owners differ from that of an industrial plant? The difference is in this, that the value of an industrial plant to its owners depends upon the use that they make of it, while the value of a railroad plant to its owners depends upon the use that others make of it. It is private property employed in a public service, and its value to its owners depends upon the extent to which it is used by the public.

It is this consideration which I wish to apply to the

much discussed question of a reasonable profit upon the cost of the public service performed by a railroad company. If that service were to be rendered by a public plant, those for whom it is performed might claim that they should be served at the actual cost. It is only because the plant is private property that a profit is demanded, and the greater the profit from the plant, the greater the inducement to increased investment in such property. But the plant is not altogether private property. Some part of it belongs to the people; that is, the part that occupies the public highways, and much of the right of way and station grounds has been acquired through a delegation of the power of eminent domain for that purpose. The franchises, too, are a grant from the people, the corporate power and the right to collect tolls, with the other privileges specially granted to common carriers. All of these privileges, granted gratuitously, go to make up what is known as the good will of the business, a valuable asset of the railroad company; and that which makes this good will of the most value is the grant of a monopoly of the service to which these privileges are applied.

These grants have been made for the welfare of the people in general for their potential use in the enjoyment of better facilities of transportation than they could otherwise obtain. They have been granted gratuitously, and, as public rights and property dedi-

cated to a public service, the people have a claim to their use at actual cost for their necessary requirements. The railroad company should not be permitted to place an exorbitant price upon the service performed by public property, so far as it is applied to those requirements which are actually necessary to the people in general, — the requirements for that circulation from place to place that is so essential to the wholesome development of the body politic.

Viewing the railroad company as a public servant, it would be expected to meet the necessary requirements of the public at large for their personal transmission from place to place at the actual cost of the service; that cost, be it remembered, including a fair rate of interest upon the investment in private property. For the company has not invested a dollar in its good will. If the necessary requirements of the travelling public are to be furnished at cost, where is the profit to the railroad stockholder, the inducement to invest money in the performance of a public service? The answer to this question is based upon an entirely different consideration than the cost of that service; upon the other element of a reasonable rate to which I have already adverted, — the value of the service performed in each specific transaction apart from its value as a necessary requirement for the people in general. This specific value to each person is in the different character of the service rendered to that

person, the difference to be measured by the departure from the average service required for the average mileage rate of fare. It may consist in a much higher rate of speed, by which a journey may be so accelerated as to permit of the time so gained being applied to some purpose of especial value to the person making the journey. Or the value of the service may be in the enjoyment of the use of vehicles luxuriously furnished, or of conveniences which, though desirable, are not necessary, as sleeping accommodations, dining-cars, observation cars, bath-rooms, barber shops, stenographers, etc., on the trains. For these services an additional charge would be appropriate, since they are outside of the necessary requirements of the masses of the people for whom the service is primarily intended, and the cost of this service is not included in the cost of that ordinary service.

If I were asked to state the basis on which the charge of additional service of this character should be established, I should reply whatever the railroad company might demand. For if it ask more than the value of the service to the person who desires it, he will not avail himself of it, but will make use of the facilities which may be secured by law to the people in general. The reasonableness of this basis for special facilities lies in the fact that the relation between the railroad company and the traveller who enjoys these luxuries is different from that which the company bears to

the average traveller. These luxurious appliances are furnished altogether at the cost of the company; they are peculiarly private property, not put to the general use, but to the use of such persons as are willing to pay the price asked for them. The relation between the two parties to the transaction is therefore purely a contract relation; the price demanded may either be given or withheld. The value of the property to the owner still lies in the use made of it by the public, and the greater the use, the greater the profit from the investment. Therefore we may rely upon this balancing of inducements and motives to secure the use of these special appliances at the lowest rate of compensation consistent with a reasonable profit to their owner. There is another departure from the standard of an average service for an average rate that should not be passed over without notice. The service just considered is that of a higher grade than the average service. There may also be a service of a lower grade than the average which it would be profitable to the railroad company to render at less than the average rate, and therefore which many individuals would accept, — trains at a lower speed, equipment of a cheaper style, — always provided that the standard of safety was maintained.

This argument leads to the establishment of three classes of passenger service, — the average service to meet the necessary requirements of the people in

general at an average reasonable rate, a service of a more luxurious character at a higher rate, and one affording less comfort than the average service, but at a lower rate. These are the first, second, and third class services which are common everywhere else than in the United States. An average service at an average fare was represented in some measure by the so-called parliamentary trains, established in Great Britain in 1844. The necessary requirements were that the speed of the trains should not be less than twelve miles an hour including stops, in roofed carriages provided with seats, and the average rate for this service was fixed at a penny a mile. This was actually a third-class fare, though before that time there had been a third-class service at a slower speed in open wagons without seats. As the rate of a penny a mile was quite one-half of the first-class rate, it might be assumed that the rate fixed for the parliamentary train service was barely sufficient to cover its cost, when applied to the estimated number of passengers that would use it. Here came into action the distinctive function of a railroad plant as compared with an industrial plant. The railway company was obliged by law to run a certain number of trains daily of this average character. In order to perform this service without loss, it was desirable that such trains should be filled to their capacity. Therefore the speed of the trains was accelerated and the style of

the equipment was better than was legally required. What has been the experience in the conduct of this service? The third-class travel doubled from 1870 to 1880. In 1880, out of 540,000,000 passengers, five-sixths were third-class, furnishing more than twice the revenue of the other classes. In 1903, out of 1,226,000,000 fares, exclusive of season tickets, 89 per cent were third-class, 6 per cent second, and 5 per cent first-class. The third-class accommodation was fully as good as that before provided for the second-class service, and on several English roads the second-class service has been abolished.

The average rate of fare in Germany in 1896 was 96 cents per mile; in 1894 in Russia it was 72 cents; in India it is about 5 cents per mile; while in the United States it is over 2 cents per mile, and this average is brought down by the inclusion of excursion and commutation tickets. The average fare paid for average service by the people in general is about 3 cents per mile. I think that in this respect the railroad fares in this country should be regulated by law; and if this regulation were to be based upon the cost of the service, as I have suggested, the effect would undoubtedly be the same as in Great Britain, — an enormous increase in the use of the service with great profit to the railroad companies. Our 80,000,000 of population by no means use our railroads in the same proportion that the 40,000,000 of Great Britain

do. In 1903 the people of that country made on an annual average thirty railroad journeys to each individual. In 1905 the people of the United States made on an average but nine journeys to each individual. The average fare for each journey was about 65.3 cents. If by reducing this average, say one-third, to 44 cents per journey, the average number of journeys could be increased to the average in Great Britain, say threefold, the total number of passengers would be increased from 745,000,000 to 2,235,000,000, and the total annual passage earnings of our entire railroad system would be increased from $486,000,000 to $983,000,000, more than double the gross earnings from that source in 1905. New York has long had an average rate by law of 2 cents per mile, and recent agitation is resulting in a regulation of passage fares by the legislatures of many other States at about the same rate. Although this is not the establishment of a standard for an average rate for an average service, based on the cost of that service, it approximates somewhat to that ideal, and it will be interesting to observe the effect of its application to the use made of railroads in passenger service and upon the revenue from that traffic.

I have so far said but little about the cost of service as a basis for regulating the compensation for freight service. As already stated, this is entirely distinct in its character from passenger service, which I preferred

to consider first as being less complex, and therefore more available in illustrating the fallacy of regulating railroad rates upon the cost of service, without regard to the value of the service to the person for whom it is rendered. This latter element enters yet more extensively into the consideration of a reasonable freight rate, as I propose to show in the next lecture.

CHAPTER VI

THE RESULTS OF INEFFECTUAL CONTROL OF RAILWAY CORPORATIONS

If I have taken up much time in the discussion of a basis for reasonable rates, it is because this is the origin and the source of the prevailing dissatisfaction with the management of the railroad system of this country. If this were a matter between man and man, between the carrier and his customers, it would be taken to the courts, where the carrier would have his day. It is, however, not a difference of opinion in a concrete case, but one in which the general public is aroused against the railroad corporations as a whole. We are being made to pay too high rates, the people say, and they seek relief through a statutory regulation of the compensation for the service which the railroads perform. Legislatures, in their desire to respond to this popular mandate, base their acts upon the presumption that railroad rates in general are too high because certain corporations pay good dividends and because certain persons who control these prosperous corporations have become multi-millionnaires. The legislator who has a good word for the railroad companies, who suggests that there is something which

might be advanced in their defence, is silenced with the insinuation that he is a friend of the railroads. As a consequence, but little attention is given in legislative debates to the reasonableness of existing rates as a whole. They are assumed to be too high because the railroad companies are making too much money, and that stops further argument. The only question to be solved by the legislature is how to make the rates lower.

It is at this stage of legislation that we hear of the cost of the service as the standard of a reasonable rate. There is a huge accumulation of evidence and of statistics, of which but little use is made except by theorists, and the legislature hastens to accomplish its object by fixing a flat rate, of say two cents per mile, for passage fare, which ends the matter. But when it comes to reducing the rates on freight traffic, that is found to be an entirely different affair. One traveller is like another in railroad service. One may travel a longer or a shorter distance or he may want better accommodations, either of which conditions may be provided for in the rates of fare. But there are distinctions of quite a different character in *things* that are offered for transportation, — distinctions so fundamental that they cannot be ignored in establishing a reasonable rate of compensation for each specific transaction or in estimating the cost of the service rendered in its performance.

The cost of passenger service is based upon the traveller as a unit, one passenger one mile; the cost of freight service cannot be based upon the single shipment as a unit, one shipment one mile, for shipments vary widely as to weight. Therefore the cost of freight service is based upon weight, and the transportation of one tone one mile, or the ton-mile, is the unit assumed in estimating the cost of freight traffic. In the previous lecture, the elements that enter into the cost of railroad transportation were analyzed in connection with a passenger rate, and it is unnecessary to refer to them in connection with freight traffic, except as the conditions may be different.

The total amount expended in a year for interest, maintenance, and operation of a railroad proportionately to the estimated amount of freight transported in that period is divided by the total ton-mileage, and the cost of the service per ton-mile is thereby ascertained. How is a reasonable freight rate to be based upon the average cost per ton-mile? If it be assumed that the cost of shipping a ton of freight one mile is one cent, then the cost of shipping it a hundred miles would be a dollar, and of shipping it a thousand miles ten dollars. This is the rule applied to rates of passage; why not the same rule to rates of freight, if the cost of the service is to be the basis and the ton-mile the standard of measurement of a reasonable rate? If it cost one cent to ship a ton of grain one mile out of Chicago, and it

costs an additional cent for each mile, then it costs $8.00 to ship it 800 miles to New York, or 20 cents a bushel, which in fact would be a prohibitory rate. No further illustration seems to be required to show the fallacy of basing a reasonable freight rate solely upon the cost of the service per ton-mile. The absurdity is obvious, but wherein does it consist? In ignoring other elements that enter into the cost of the service besides weight and distance, as in the cost of receipt and delivery, of loading and unloading, and other items that I will not stop to recount; but especially in disregarding the inherent qualities of different commodities offered for shipment, which are recognized in practical rate-making, and are set forth in the classification tariff.

In a classification tariff, the element of distance is disregarded, and attention is confined to the qualities of the commodity offered for shipment, as they may affect the cost of the service rendered. This idea of classification did not originate in railroad transportation. It had long been in effect among carriers before railroads existed. The wagoner knew how many pounds his team could haul and how much his wagon body would hold. Therefore, two factors entered into his charge per package, weight, and bulk; and so the railroad classification is principally based upon the weight and bulk of the articles offered for transportation. Things light and bulky, like feathers, are in one class; things heavy and bulky, like hollow ware, are

in another; things heavy and compact in another. The labor in handling is another element in classification. If many separate articles go to make up a hundred pounds, they are placed in a different class from articles each of which weighs a hundred pounds or more. But one might be silks and another coarse cotton goods. Would it be reasonable to require that the carrier should ask no higher rate on the silks than on the cotton goods? Here another consideration obtains, — the carrier's risk. For he has to insure both shipments, one worth perhaps only five dollars and the other as much as five thousand. Here the element of value enters into the classification, not the added value given to the shipment by the service of transmission, but the insurable value; and the different kinds of goods are classed accordingly to cover the difference in value for which the carrier is insurer.

Under this system of classification, goods are not only classified according to their weight, bulk, and insurable value; they are sub-classified again according to the different ways in which goods of the same character may be packed. There is still another sub-classification in which the same class of goods is shipped in car-load lots, and yet again, the element of carrier's insurance leads to another in which the same class of goods similarly packed is shipped at owner's risk. The degree of refinement to which the classification of goods has been brought in railroad tariffs may be illustrated

by the statement that such an article as empty barrels appears no less than seventy-five times in classified lists. In the so-called "Official Classification," the number of articles as alphabetically indexed runs up nearly to four thousand items. When these items are further differentiated as to manner of packing, car-load lots, etc., the classification fills a volume of two hundred and fifty pages. Classification is the method by which a relation is effected between the myriads of things of incongruous natures that are offered for shipment. It is the real basis of relatively reasonable rates. Yet it does not recognize distance as an element in the cost of service. So that practically distance is but a secondary consideration in arriving at that cost, and the ton-mile unit is therefore altogether inapplicable as a standard of measurement of the reasonableness of rates based upon a classified tariff.

As has already been shown, the ton-mile standard is also incapable of direct application to a tariff based upon distance, for if the rate for one hundred miles were proportionately greater than that for one mile, the rate would be a hundred times as much, and rates so graded would greatly limit the distance to which many kinds of goods could be shipped with profit to the owner, and, at the same time, there would be a disproportionate profit to the carrier. Therefore, rates for distance are graded in groups, say of ten miles, the rate for a hundred miles being perhaps only double

that for the first ten-mile group, while those in the intermediate groups increase by degrees up to the maximum rates. If it be the case that the rates for a hundred miles are not more than double those for ten miles, it is also the case that rates for a thousand miles may not be more than double those for a hundred miles.

If I have stated this argument with sufficient clearness, you must perceive the comparatively insignificant part played by the element of distance in the reasonableness of a rate upon a specific shipment, and also that the ton-mile unit should be disregarded as a standard in determining the unreasonableness of a specific rate. It is essential to the clear understanding of a reasonable compensation for railroad transportation to get these propositions firmly fixed in your mind: first, that the great service which railroads have rendered to mankind is in diminishing and in almost nullifying the obstructions offered by distance to the transmission of persons and things; and next, that the ton-mile standard of reasonableness which is paraded before one's eyes and vociferated in one's ears is merely a standard of reasonableness of the average rate charged upon the total weight of the freight traffic of a railroad company; that rate being determined by the average distance over which the total weight has been transported. The absolute inadequacy of such a standard for any practical purpose must be obvious, when you consider that it is incapable of application to a method

of classification which must be the basis of any system of rates for the carriage of commodities of widely varying characteristics.

A stage in the argument has now been reached in which I propose to discuss the fallacy of basing a reasonable freight rate solely upon the cost of the service, ignoring its value to the person to whom it is rendered. The value to the traveller of the service rendered in taking him from place to place is in the benefit to him of the change of situation, either for purposes of necessity, business, or pleasure. The value to the possessor of a commodity in the service of shipping it from place to place is in the additional value that is given to it by its change of situation. Unless grain can be sold at a higher price in New York than in Chicago, no additional value is given to it by the service of transporting it there; and the inducement to make the shipment is taken away, if the difference in price is absorbed in the charge for performing the service. The conclusions to which this line of argument tends are that the value of the service rendered to the shipper is of greater importance in determining the reasonableness of a rate than the cost of the service, that the highest rate which could possibly be charged is one that would absorb the added value given to the shipment by the service of transmission, and that the lowest rate acceptable to the carrier could not be less than the cost of that service. Somewhere between this maximum and this minimum

rate, the reasonable rate must exist, and the most reasonable rate ought to be that in which the profit to each of the parties to the transaction is most evenly balanced.

The proposition of reasonableness as here defined implies the existence of a contract relation,—a relation into which bargaining may enter. Under such conditions there is a balancing of inducements and motives in fixing the compensation for each transaction, and in that way a rate is established which is looked upon as reasonable by the carrier and by the shipper. To the extent that the freedom of either to bargain is restricted by influences beyond his control, to that extent his power to obtain a reasonable rate is restricted, and if the restrictive conditions become so influential as to preclude either party from having an important part in fixing the rate, the reasonableness of that rate becomes subordinated to another consideration, that of the justice of the rate.

Any compensation for a specific transaction of carriage is therefore reasonable, which is the result of free bargaining between the carrier and the shipper. This statement, however, implies a choice of carriers, for if the shipper be confined to a single carrier, then his freedom of action is restricted to the acceptance or rejection of any rate that the carrier may demand; he must either pay it or forego the service which he desires. His relation to the carrier is no longer one of contract, but of status; the issue is not as to the reasonableness

of the rate demanded, but of its justice, and that issue must be determined by a third party either by arbitration or by law. The restriction of the service desired by the shipper to its performance by a single carrier is a monopoly; a choice of carriers implies a competition among them for rendering the service which he desires.

If competition be a condition essential to the reasonableness of the compensation demanded by a carrier, are all rates reasonable which are affected by competition? If the reasonableness of a rate is to be measured by the cost of the service, then when competition has free play, we may be sure that the rate will gradually approximate to the cost of the service; for that is the effect of competition when unrestricted. But such competition has also another effect,— it results in discrimination.

When we use the term "discrimination" in connection with the service of a railroad company, we should keep in mind that discrimination is a fundamental characteristic of that service, which is recognized in the classification of goods for shipment and in the difference of rates for distance. But the discrimination that we have here in view is a discrimination between shippers "for a like and contemporaneous service in the transportation of a like kind of traffic." We cannot assume that a railroad company voluntarily makes such a discrimination without inducement, and the inducement which has the greatest weight with a carrier in

making a reduction from his maximum rate is that some other carrier stands ready to take the shipment in case he declines to accept a lower rate. In such a case, the shipper is free to contract with either carrier or to bargain with both. This is competitive discrimination, and here we touch upon the most fruitful topic for discussion that has been raised among those who interest themselves in the determination of a just and reasonable rate of compensation for the service performed by a common carrier by rail.

To preserve the distinction between the reasonableness and the justice of a rate, I should repeat that the reasonableness of a rate consists in the equitable division between the shipper and the carrier of the profit to be derived from a specific act of transportation; that freedom of action on the part of the shipper is essential to his obtaining a resaonable share of that profit; that such freedom of action can only be assured to him by a choice of carriers; that it is only under such conditions that competitive discrimination can exist, and that such discrimination results in the gradual reduction of rates to the cost of the service, in the opinion of the carrier.

In this successive reduction of rates, all the rates as so graded cannot be equally reasonable,— some must be more so than others, if reasonableness consists in the equitable division between shipper and carrier of the profit to be derived from the transaction; and as reasonableness in a rate entirely disappears when it is

so high as to absorb all of the profit to the shipper, so it entirely disappears when the rate becomes so low as to leave no profit to the carrier. While there is a choice of carriers and freedom of bargaining, competitive discrimination so unrestricted tends to rates that are unreasonably low. The immediate effect of low rates is to urge the carrier to economize in the cost of the service, to lower wages, and also to resort to new methods, inventions, and devices for diminishing the cost of carriage, and, under the spur of unrestricted competition, American railroad managers have reduced that cost far below the minimum standards in Europe.

Each successive step in this reduction is followed by a corresponding reduction of the rate, so that a reasonable rate, from the carrier's point of view, is unattainable under conditions of unrestricted competition. In order to secure some measure of profit to himself, he seeks to restrict that competition: and first he restricts it as between shippers. He endeavors to confine his lowest rate to the shipments of a chosen few who can give him the largest amount of business, hoping that he can obtain a higher rate for a similar service from other shippers in smaller quantities, and thereby secure a higher average rate on all business of that character.

This is a discrimination between persons in the performance of an identical service, and the common law left the carrier free to discriminate in such cases, subject to one limitation, that he should deal justly and

reasonably by all who desired his services. That is all that limited his freedom of action, but simple as it sounds, it is not a simple matter to define. It is not a question of the reasonableness of the rate in itself, for reasonableness vanishes from a rate that leaves no profit above the cost of the service, and it is in the effort to make the rate more reasonable from his point of view that the carrier has endeavored to restrict the field of competition. It is no longer a matter of the amount of the rate in itself, but of the relation between two rates, — a relation into which considerations of justice should enter, and which, therefore, calls for the intervention of arbitration or of the court.

The Interstate Commerce Act defines the justice of this relation when it says that there shall be no discrimination between persons "for a like and contemporaneous service in the transportation of a like kind of traffic *under substantially similar circumstances and conditions*"; and here is the gist of the whole matter as to unjust discriminations between persons: admitting that a like and contemporaneous service has been performed in the transportation of a like kind of traffic at a lower rate for one person than for another, has this service been rendered "under substantially similar circumstances and conditions"? — for if it has been, then there has been an unjust discrimination between persons. The carrier, however, will maintain that the discrimination which he makes in the rates complained

of is not unjust since the circumstances differ, for the shipment on which the lower rate is made is so much larger that the conditions as to the cost of service become different, and, therefore, that he can afford to carry the larger shipment at a lower rate. Where this assertion can be justified with reference to a specific transaction, a discrimination between persons is not unjust, provided that the cost of service is the basis of a just relation in rates; and it is because the cost of service is asserted to be less in the shipment of car-load lots that car-load rates are recognized in the general classification of goods.

The question of justice in a discrimination of rates between persons cannot practically arise where there is a choice of carriers and freedom of bargaining by persons offering shipments in small quantities, if such persons are informed of the rates made for their favored rivals. It is to prevent them from obtaining this information that resort is had to secret rates. This is the difference between open and secret rates; the former are public and free to all under like conditions. They are known as special rates, and are to be distinguished from rates of which a knowledge is confined to the parties to them. The very secrecy in which these are conceived testifies to a consciousness of their injustice. They are the fruit of conspiracy, and are so stigmatized in the amendment to the Interstate Commerce Act, known as the Elkins Law, which has made the payment and receipt of rebates alike criminal acts.

There is another form of competitive discrimination besides that between persons,—a discrimination in favor of communities which have a choice of routes to or from an area of production or a centre of distribution. Here again the competition among the carriers by the several routes brings down their rates of transportation to the cost of the service; but if the rates are open alike to all persons in the community where they are in force, such rates are just, even though they may be unreasonably low. That is to say, they are just in their application to the service rendered to that community; yet they may bear an unjust relation to the rates enforced by the same carrier upon other communities; as where the normal increase of rates for distance is disregarded. This is a discrimination so obvious that it has powerfully affected public opinion and legislative action with reference to the regulation of railroad rates by law.

Discrimination of this kind between communities induced the provision in the Interstate Commerce Act, known as "the long and short haul clause," which prescribes that no greater charge shall be made for transportation "under substantially similar circumstances and conditions, *for a shorter than for a longer distance* over the same line in the same direction, the shorter being included within the longer distance." It is apparently unjust that goods to or from one community should be carried past the warehouse doors of another community at a lower rate than is required of that com-

munity for an identical service for a shorter distance, and such discrimination becomes a practical grievance when business is thereby diverted from the one community to the other. But the carrier says, "What shall I do? I must either accept the same rate from the other community that is offered by my rival or I lose the business."

This view has been accepted by the United States Supreme Court in its interpretation of the long and short haul clause as applicable to a case of this kind, but with the limitation that the competition relied upon be not artificial or merely conjectural, but material and substantial. A substantial competition might be regarded as one that exists despite the will of the carrier as opposed to an artificial competition or one which the carrier had been instrumental in establishing, while a material competition would be one that could be shown to have seriously deprived the carrier of traffic at the normal rate, and not merely conjectural in its effects upon that traffic.

The question as to what is unjust and unreasonable as to relative rates affected by competitive discrimination between communities has assumed gigantic proportions with the growth of interstate traffic. It has passed beyond a matter of rates between cities, even as between such centres of commerce as Boston, New York, and Philadelphia, or as between Chicago, Cincinnati, and St. Louis; until differences of this character

have become sectional, involving the subject of relative rates from the Eastern and from the Western Middle States to the South, or from the Atlantic Coast cities and from the Mississippi Valley cities to the Pacific Coast, or as to the export traffic from the Mississippi Valley either *via* the Atlantic Coast or *via* the Gulf Coast ports. This is the field in which the regulation of rates by law is sought to be applied in the interest of the general public as distinguished from the individual shipper.

Deductions from the cost of service as to the average cost of moving freight per ton-mile may be of interest to the political economist and in providing a standard for the reasonableness of rates for distance, but, as I hope that I have shown, they are of little direct assistance in ascertaining the reasonableness of the charge for the service rendered in a specific transaction. As a fact, railroad rate-making, in the strict sense of the term, is a thing of the past. The railroad freight tariffs, that is, the general schedules of rates and classifications, were made long ago. They have their origin in turnpike tolls and in the charges paid to carriers by land and water. They are not based upon theoretical considerations, but upon experience — the sad experience of carriers bankrupted by mistaken views as to the cost of service and the effects of competition. They are the solutions of myriads of transportation problems fought to a conclusion in railway warfare, and are the result

of interaction between the development of transportation by rail and of the material resources of our country, so that the two fabrics are closely knit together. The basis of the one cannot be disturbed without affecting the basis of the other. This proposition must be recognized even in a discussion of the power of a legislature to make rates, such power being limited by the vastness and intricacy of the network of railroad tariffs that enmeshes our interstate and international traffic.

I will sustain this assertion by a single illustration. The tariff on cotton goods from mills in the South to Northern and Western points required the concurrence of 160 separate corporations. This tariff covers rates from over 300 points of shipment to 6600 points of destination; so that provision is made for 1,980,000 variations in shipments from different factory towns to different markets. This special tariff relates to twelve kinds of cotton goods; so that the total number of possible permutations of rates in this one tariff amounts to nearly 24,000,000. Of course it would be impracticable to print each of these permutations separately. They are, therefore, grouped under a system of indexing that provides for all these permutations in the actual number of 72,000 rates given in separate figures in a tariff of 140 pages. Yet this is not all. These rates are joint rates; that is, they are to be divided between the several carriers in each of a number of competing lines, with no less than five distinct carriers in each line;

and as there are 160 corporations partaking in one or more of these divisions, the mind inexperienced in rate-making becomes bewildered in the attempt to grasp merely the complexity of such a system of rates.

But this explanation applies only to a tariff on a special class of goods from a few Southern States. There are similar tariffs by hundreds in use in different parts of the country, devised to accommodate specific manufacturing or commercial interests, and, in compiling these tariffs, there are differing circumstances and conditions of competition to be considered. For instance, in making freight rates between interior points north of the Potomac River and the South Atlantic region, in order to equalize the through rates by the different competing routes, there is applied a system of what are known as "arbitraries," which alone fill a book of over 200 pages. These arbitraries are fixed amounts which certain parties receive irrespective of distance; as, for instance, compensation to the owners of costly bridges over great rivers, like the Mississippi at St. Louis, or of certain connecting or belt lines around great cities. Such arbitraries are first deducted from the total rate before the remainder is proportionately distributed among the other parties to the contract of carriage.

When we consider that this system of special rate-making is in effect all over the United States, and that changes in many of these special tariffs are almost daily demanded in the changing conditions of commerce,

we can comprehend that it is impossible for rates to be made by statute. Legislatures have delegated this function to commissions of men learned in anything else than rate-making. Such commissions have entered upon their duties without previous comprehension of the gravity of the work intrusted to them, and without an appreciation of the results which follow from hasty action on a superficial view of alleged injustice or unreasonableness in rates. They have arbitrarily diminished one or more rates, assuming that it was merely the railroad companies that would be unfavorably affected by their action, and, to their surprise, they have often found that in diminishing a single rate, perhaps within a limited area, they have seriously disturbed the equilibrium of commercial competition in a far wider region. Disturbances of this character also arise from the independent action of the many commissions engaged in regulating rates within the borders of as many different States, thereby affecting interstate traffic that is not directly under their control.

I do not wish to be understood as decrying the importance and value of the regulation of rates by a commission; nor shall I enter into any argument as to the constitutional powers and authority of such a body. I seek to enforce primarily the proposition that the reasonableness of a rate is an abstraction where rates are freely regulated by competition, — an abstraction of so little practical value in its application to the com-

pensation for the service rendered by railroad companies that, where competition exists, it may be disregarded. What is wanted is the intervention of the law and of its administrators to regulate the relative *incidence* of rates upon communities that enjoy the competition of rival carriers and upon those which do not, but which are limited to the service of a single carrier, — conditions which I have already defined as conditions respectively of contract and of status.

If I have enlarged upon the vastness of the field in which discrimination between communities is active, and upon the intricacy which enmeshes the commerce of these communities with the incidence of railroad tariffs, I have not done so with the intention of maintaining that these are difficulties which are insuperable in an attempt to regulate this relative incidence of rates in the interest of the general public. I have only stated these facts as premises on which to found an argument as to the manner in which the powers and authority of the Interstate Commerce Commission might be usefully asserted in the public interest with reference to discrimination between communities.

In considering discriminations of this character, the Commission has not to be concerned so much with the reasonableness of rates in themselves as with their just relation to each other. Taking the simplest form of discrimination, that defined in the long and short haul clause of the Interstate Commerce Law, where there is

the same or a lesser charge for an identical service over a longer distance, the shorter being included in the longer haul, what justification is there for the lower charge for the greater service? If the circumstances and conditions be identical, there is none. But no such case will arise, for the railroad company will always demand its maximum rate in such a case. Where complaints of this character are made, it will seek to justify its rates by the assertion that the circumstances and conditions affecting the service are not substantially similar in the two cases. This is the issue which the Commission is called on to determine, and its determination is aided by the principle laid down by the Supreme Court "that the competition relied upon be not artificial or merely conjectural, but material and substantial."

What is material competition, if it be not that which deprives a railroad company of the power to fix its own compensation for the service performed?—and such material competition can only exist where the shipper is free to bargain with two or more carriers. What is substantial competition but that which has its foundation in the natural environment that makes competition not only possible, but inevitable? Material competition may, therefore, be looked upon as a condition, and substantial competition as a circumstance which justifies discrimination between communities, and the matter of the existence of such competition was clearly placed in

the power of the Commission to determine under the Interstate Commerce Law.

But if it were found that the competition of this character did exist, it was not so clearly within its authority to fix the extent to which such competition should affect the relative adjustment of the competitive rate with the rates of the communities that were complaining of its injurious effects upon their welfare. The Supreme Court decided that the disparity in rates produced by actual ompetition was not prohibited, "so long as the low competitive rate is remunerative to the carrier and the non-competitive rate is reasonable in itself." This ruling of the court was looked upon by the Commission as inadequate to the proper correction of transportation abuses, and it does seem inadequate for the redress of the grievances under which the non-competitive community feels that it is suffering, when applied to a specific transaction. If it means anything in such a case, it is that the carrier must not fix a competitive rate below the cost of the service rendered in the particular instance. This opens up a bewildering vista of abstract mathematical problems as to the variation in the cost of each particular service from the average cost of the whole service performed by the railroad company, to which each theorist will offer a solution, and none of them will be of practical assistance in the application of the ruling of the court to the particular case.

Yet where there is an actual grievance of this kind, it should be either capable of a remedy or of a palliation. The competiton may be merely conjectural, if it cannot be proved that it has ever seriously affected the revenues of the railroad company; and if the commission finds this to be the case, it should have the authority to require that the normal rate should be applied to such traffic. Or it may be found that the competition is in fact not due to natural circumstances of environment, but to artificial circumstances created by competition between the railroad companies themselves, as at interior railroad junctions, dependent solely upon railroads as means of transportation. Cases of this kind are not easily dealt with. An attempt to apply the normal rates to the traffic of communities which have long enjoyed the advantages of relatively lower rates under artificial competition will be as vigorously resisted when enforced by law as when maintained by agreements among the railroad companies. Although the competition may be that defined by the Supreme Court as artificial, it has acquired substance by prescription, as it were, and the Commission will have to recognize its existence as material and substantial.

But if the Commission be powerless to determine that the low competitive rate is unremunerative to the carrier, it may still determine that the non-competitive rate is unjust as applied to the business of the community that is suffering from the resulting dis-

crimination, and that not by a standard of the relative cost of the service, but by the relative effect upon its business, which it is now within the power of the Commission to palliate within reasonable limits. The conditions prevailing at a natural competing point diminish in influence as they radiate from such a centre. The railroad companies admit this when they so adjust their local rates from a point of competition as not to permit the competitive rates to divert business to that point which would afford them a greater revenue, if brought from another place. In the interest of the community which is losing business by such discrimination, this principle should be applied in the reverse direction. The maximum rates at local stations should diminish as the business of those stations is brought within the zone of influence of competition. The rates should be less, the nearer the local station is to the competing point, in such a ratio that the difference in the rates alone will not be sufficient to divert business from the local station to the competing point. It is practicable for the interests of non-competitive communities to be protected to this extent, and under the increased powers of the Interstate Commerce Commission, under the law as amended in 1906, it has the authority to palliate, if not entirely to remedy, the most serious grievance which the small communities suffer from competitive discrimination in railroad rates.

In the wider field of competitive discrimination to which reference has already been made, the extent to which the regulation of rates by law may be usefully exerted in the general welfare is not so apparent. The grievances of which communities complain as the result of competitive rates may not be altogether attributable to that cause, or it may not be a question which involves the interest of the consumer, but one as to which of two rival centres of distribution shall supply his wants. For the Commission to intervene directly in such cases would expose it to accusations of partisanship, while the enlarged powers recently delegated to it may be more usefully exerted for the public good in the investigation of circumstances and conditions that have given rise to the objectionable discrimination.

In the previous lecture I suggested that a rate based upon the total cost of service could be nothing else than the standard of an average rate for an average service, and I applied that standard to the determination of a reasonable rate for such a passenger service as would meet the requirements of the travelling public in general. In this lecture I have taken the position as to freight rates that, where competitive discrimination exists, the public welfare is not involved in the reasonableness of rates established by bargaining between carrier and shipper, except as to securing publicity and the uniform application of such rates to shipments under like conditions.

It is in the effect of such competitive discrimination upon non-competitive communities that the sovereign power is called upon to intervene, in order that justice may be done in the application of such maximum rates to the business of these non-competitive communities as will not be relatively unjust, in comparison with the rates in existence where competitive discrimination exists. In recognizing only the relative justice of two or more rates, this line of argument ignores the reasonableness of any specific rate in itself; and it may be asked if this matter of the reasonableness of a rate, as based upon the cost of service, should have no weight in the adjustment by law of the compensation of a common carrier by rail.

I have endeavored throughout this discussion to enforce the proposition that the cost of the service alone is inapplicable in fixing the proper compensation for the service rendered in any specific transaction, because of the impracticability of determining what the cost really was for the performance of that specific service; that what had been ascertained in fact was the average cost per ton-mile for the performance of the entire freight service of a railroad company for a certain period; and I asked how such information could be utilized in determining a reasonable rate upon a specific shipment. At most, it but aids in arriving at a standard as to the reasonableness of the compensation received in gross for the entire service

rendered. As was shown in the discussion of passage rates, it may be utilized in arriving at an average rate for an average passenger service; and so it may be utilized in arriving at the average rate for an average freight service per ton-mile, if it can be shown that there is any such average service which is actually rendered.

If there be any freight service that may be looked upon as an average service, it must be rendered in the transportation of some commodity which in weight and bulk constitutes an average percentage of the total traffic, and which is not susceptible of the distinctions as to inherent qualities, manner of packing, and insurable value, which affect the classification of most commodities for transportation by rail. At the same time, it should be a commodity in such general use that fluctuations in its price would not merely affect a class of users, but would exert a general and profound influence upon the public welfare. In seeking for a commodity that would fulfil these requirements, our attention is directed to the commodity of coal, and particularly to bituminous coal, as being so distributed over our national area that it may be supplied to most communities within the range of the average haul of the total traffic of our entire railroad system.

If these premises are correct, we have in bituminous coal a commodity to whose transportation may be

applied the average cost of service for an average haul, and the reasonable rate may be based on the average cost of the service per ton-mile by eliminating the elements of equipment, other than motive power, and of receipt and delivery. For it is practicable to have the coal transported in private cars received and delivered on private tracks, and loaded and unloaded by the owner. With the elimination of these factors from the problem and the requirement that the train shall be loaded to the tractive power of the locomotive, it should be practicable to arrive at a reasonable rate per ton-mile for transporting a train-load of bituminous coal from the mine to the consignee's side-track, including the return of the empty cars. This proposition is further simplified by the impending separation of the mining industry from the transportation service, as required by the recent amendment of the Interstate Commerce Law.

This amended law, known as the Railroad Rates Act, exhibits a tendency to more extensive regulation of the character of the public service rendered by the railroad corporation engaged in interstate traffic, as well as of the compensation for the performance of that service. The importance of this matter warrants the separate consideration which will be given to it in the succeeding lecture.

CHAPTER VII

THE REASONABLENESS OF RAILWAY RATES

A RAILROAD corporation, by the provision of its charter, undertakes the carriage of persons and property between certain places. These undertakings are performed by contract with each passenger or shipper, and the terms of such contracts are defined either by common law or statute, or by special agreement. However defined, the contract of carriage includes an obligation either expressed or implied, that the person or property shall be delivered at destination in the same condition as received, except as affected by inherent qualities or by causes beyond the carrier's control. This statement is sufficient to indicate that safety is the primary requirement in railway transportation. It is a requirement inherited from the contract of the carrier by turnpike, and has been enforced upon railroad companies with increasing strictness, both by courts and legislatures.

But this requirement has been enforced mainly in the interest of the individual passenger or shipper; enforced by the imposition of verdicts for damages arising from overt acts, and which served only indirectly to prevent their recurrence. It is this distinction

that is observed in the service rendered by a railroad corporation; in so far as it is a matter of contract for a specific transaction, the company is responsible directly to the other contracting party. Its responsibility is not measured by the extent of its negligence, but by the consequences. Let it be never so negligent, it goes scot free if, through the goodness of God, the lives or property intrusted to its charge escape unscathed. It is only after some tragic catastrophe has aroused popular indignation that the attention of the sovereign authority is directed to such events as matters affecting the public welfare, and steps then are taken to prevent their recurrence.

The primary duty of the railroad corporation in the performance of its service to the public is to safeguard the lives and property that it has contracted to transport. The judicial power of the State is exerted to penalize the failure to discharge this duty as measured by the consequences to individuals, and so the executive authority may be invoked to avert such consequences from the people in general by the exercise of the police power inherent in all organized governments. Since that power is to be exerted in the general interest, it may be extended to the protection of other persons than travellers or shippers, to the safety of persons on the public highways or entering otherwise upon railroad property, or to matters affecting the health or comfort of the community.

These purposes will not be accomplished merely by prescribing regulations. These are not self-acting, but must be enforced by efficient inspection, and it is not saying too much to assert that the character of the inspection is of more importance than that of the regulations. The railroad officials and employees know far more about the defects of their own organization, equipment, and appliances than any outside party can possibly know, and, while they may render a lukewarm obedience to such regulations, they will take measures in anticipation of a close and sharp inspection which will go beyond the letter of any regulations that could be devised by government officials. What the railroad managements respect is the criticism which follows upon letting the light in on their deficiencies, and, for this reason, prompt publication of the reports of competent inspectors would secure far safer service than by merely promulgating bureaucratic regulations. The effect of the reports of the inspectors of the British Board of Trade in securing safety in railway travelling bears out this assertion.

It will be admitted that this must be the case when one considers the means by which railroad transportation is effected, — the roadway, the equipment, and the movement of trains. In each of these departments many instrumentalities must be efficiently coördinated to bring about safety in operation. In each of these

instrumentalities, many devices, appliances, and processes are employed to that end, and slight defects in minute parts or the neglect of secondary details in operation may lead to disastrous results. Terrible catastrophes have ensued from a defective rail-joint or wheel, or from momentary inattention to signals. The efficient causes in some of these cases may have been so obscure as to have escaped the closest inspection, not only before but after the occurrence; but most of the so-called railroad "accidents" are not accidents at all in the correct meaning of the word, for they may be traced to defects in the plant or to inattention in its operation.

In tracing these train "accidents" to their ultimate causes, the closer and more intelligently the investigation is conducted, the more beneficial will be the result. If it take the form of a coroner's inquest in which the immediate purpose is to fix the responsibility for a homicide upon some individual, the other and more important purpose, so far as the public welfare is concerned, will be defeated; for every person who has been in any way connected with the affair will strive to conceal what he knows or thinks about it. If the investigation of a train accident were directed to finding out the cause, rather than to fixing the blame, the persons privy to the circumstances would be much freer in giving their testimony and in expressing their opinions; and after all it is more essential to the public

to prevent the recurrence of such casualties than to send some individual to the penitentiary. We have also to recognize that in very few instances can a jury be induced to convict a railroad employee of criminal misconduct, although the same jury would mulct the railroad company in heavy damages for the consequences of that very employee's negligence.

It is advisable, too, that irregularities in train service which have been without serious consequences should be looked into, as their causes may be ascertained and remedied before they result in disaster. It is just here that efficient inspection may be of the greatest benefit. It is a work that the railroad companies should do for themselves, but which they neglect. Only after a catastrophe do they usually wake up to the necessity for closer inspection. After a derailment at a switch it is apparent that the appliance is inefficient, or, after a rear collision, it is found that a danger-signal was so placed as to be obscured by some other object, or that some rule intended to preserve a safe distance between trains had been habitually disregarded under pressure of traffic.

What is lacking in railroad service and should be insisted upon by the State is efficient supervision by inspectors who are independent of the operating officials, and who report directly to the board of directors. The responsibility for good service would then be placed upon the superior authority, which could not

plead ignorance. This is the course pursued in military service when the purpose is to destroy life; why should not the same course be pursued where the purpose is to protect it?

In no respect can inspection be more serviceable than in the enforcement of discipline among the army of employees whose office it is to transport the people and the products of the country. To accomplish this office successfully, discipline is as essential as in a militant organization. With the growth of traffic, the extending area of operations, and the increasing number and speed of trains, there should be a higher standard of discipline. Yet a resistance to reproof or to a penalty for disobedience of orders or for neglect of rules, a mutinous tendency, a disposition to oppose the interests of the company in matters indifferent to the employee, have been, it is to be feared, encouraged by labor organizations whose more immediate purpose is to advance the pecuniary interests of their members. If this spirit is to prevail, the maintenance of that discipline will be imperilled, which is as essential for the safety of employees as of the passengers intrusted to their care.

The people in general have an interest in the enforcement of discipline which is brought home to every one who has been an eye-witness to a train wreck, or perhaps a bodily sufferer from one. It is safe to say that in a majority of cases the immediate cause has been the neglect of duty of some employee. The railroad com-

pany may invest millions in bridges, rails, signals, and equipment of the most approved design and construction; the management may keep up with the times in the adoption of devices and rules for the protection of trains, and yet all this expenditure, all this care and forethought, may be neutralized by the laziness or recklessness of an employee, and a fearful disaster ensue. Then a storm of public indignation is directed against the corporation for its failure to perform its first duty in the exercise of its functions as a public servant. In so far as that failure may have resulted from the misconduct of an employee, he usually escapes any personal penalty beyond dismissal from the service, and does not share in the obloquy which attaches to the management.

Here it is that public opinion should come to the support of that management. Let its powerful exponent, the press, blame the president and board of directors who have been niggardly in expenditure or who have retained incompetent officials; let it inveigh against the manager or superintendent who has personally failed in his duty; but let it also include in its invective the employee who, knowing what is required of him, has failed to perform it. Legislation should aid in this work. The code of train rules should have approval as police regulations. An infraction of them should be penalized. It would not be necessary for the penalty to be severe, but that it should be speedily

and justly inflicted. In no way could the press of this country do more to insure the safety of railroad travel than by insisting that a violation of train rules should be punishable by law.

The service of a railroad company in the performance of a contract of carriage should not be regulated alone by the negative obligation that the person or property shall be delivered at destination in the same condition as received. It includes the positive obligation that the service shall be performed with due diligence. This would seem to be an obligation secondary only to that of providing for the safety of the person or property in transit. It is the claim most prominently set forth in lauding the part played by railroads in furthering modern civilization that they have virtually annihilated time and space in the transmission of persons and things. Yet this claim is founded rather on what railroads can do than on what railroad corporations have done. Managements boast of the accomplishment of occasional feats in breaking a record, although their average performance may fall far short of the standards which they have thereby set up for themselves.

It may be of some advantage to a few individuals to be whisked between New York and Chicago promptly in eighteen hours; but how does such a feat contribute to the welfare of the general public who are held up at hundreds of local stations that this flyer may dash past them on time? This is not the proper standard of the

duty of a railroad corporation as a public servant. That standard should be fixed for the average service rendered to the great body of travellers for the average fare. When a railroad corporation holds out certain promises to the general public as to the time of its ordinary trains, it should be held to a compliance with those promises as well as to the promise which it makes as to its rate of compensation for that service. It should not be permitted to evade that obligation by a conventional preamble to its advertised time-tables that the company does not undertake to conform to the schedules therein advertised. Whatever the railroad company undertakes as a public service, that the administrators of the law should hold it to. If it cannot run its local trains regularly and promptly at an average speed of thirty miles an hour, let it reduce that speed to twenty miles an hour. The general welfare will be all the better served if the masses can rely upon reaching their respective destinations promptly at the advertised hour; and undoubtedly this undertaking on behalf of the general public would be more satisfactorily performed if the long-distance travellers on the high-speed trains were not given preference over the humble wayfarers between local stations.

Such subrogation of the rights of the many to the convenience of the few is essentially in disregard of the public service due by a railroad corporation. It can be remedied by insisting that a railroad company has

not fulfilled its contract with the individual traveller merely by delivering him at his destination safely; but also that he should be delivered there at the appointed time. If the contract of carriage included a provision for refunding a percentage of the fare commensurate with the delay of the train in arriving at its destination, a remedy would be found for this public grievance which would be self-acting and would result in a marked improvement in the average service rendered by railroad corporations. Lest this suggestion should be viewed as an innovation for which there is no precedent, it may be mentioned that it is but the application in the interest of the general public of a rule established by the railroad companies themselves to popularize their high-speed trains between New York and Chicago.

The requirements as to safety and due diligence which are obligatory in the passenger service of a railroad company should apply with as much force to its freight service. The prevention of injury to property is not so important as where life is imperilled, since it is practicable to replace or pay for lost or damaged shipments. Claims of this kind may be readily prosecuted by the consignee under the law of common carriers, where the contract for carriage is confined to a single railroad company. The case is different where the contract is for continuous carriage over the lines of several corporations which, under the common law, are not jointly, but severally, liable unless by special contract. In such

cases railroad companies may restrict and minimize their respective obligations until it becomes difficult to fix the liability, and each of the carriers involved in the transaction is able to evade its responsibility under the common law.

Legislation in many of the States has been directed to broadening the powers of the court as to this matter and in stopping up the holes into which the railroad companies retreat to avoid the settlement of these so-called "line" claims; but no protection was thereby afforded to interstate shipments. In the recent amendment of the Interstate Commerce Act, Congress has provided a remedy by making the initial carrier directly responsible for the performance of the service to destination, leaving that carrier to fix the responsibility among the several carriers parties to the contract. The carriers, under a joint contract, are still left free to limit their liability by special agreement in other respects than as to the consequences of their negligence, and this brings us around to a consideration of their positive obligation as to the observance of due diligence as common carriers, as well as in the passenger service.

In estimating the importance to the general public of due diligence in the performance of their freight service, we must think of the vast tonnage continually in transit over our railroads and of its enormous money value. It is probable that of the 1,800,000 cars which constitute their freight equipment, one-half is usually

in profitable service, and that the contents of each loaded car might be fairly valued at $500. On this valuation there is property to the amount of $450,000,000 daily in transit over the railroads of this country, and, estimating the net profit from the turnover of this capital at 12 per cent per annum, there would be an average loss of $180,000 in profits for each day lost in transit of the total railroad tonnage, or $54,000,000 per annum. On many lines of high-priced commodities, the loss would be far greater.

Let us now average the speed of a freight train at 25 miles per hour, or 600 miles per day, and the average mileage made by the entire freight equipment of our railroad system at 25 miles per day; and we see that there is a difference of 575 miles between the possible service that a freight car could render and the actual average service. In other words, it is possible for a freight car to render twenty-four times better service than is actually the case. But to state the proposition on a far more moderate basis: if the average railroad service were accelerated to one hundred miles per day, there would be a saving of three days in transit, or of interest on the idle capital invested in their tonnage amounting to over half a million dollars in every four days, or something like $37,000,000 per annum.

What becomes of the boasted annihilation of time and space in transportation by rail, if the average service of a freight car is not more than 25 miles per

day or about one mile per hour? The trouble is not with the plant, but with the management, and the people have the right to better service; that is, to better average service for the average freight rate. This might be secured by a regulation which would not have to be enforced in the courts, but which would be self-acting, or with the rebate from the average fare suggested in cases where the passenger trains were not kept in their advertised schedules.

The average service of 25 miles a day for a freight car includes the time occupied in loading and unloading its contents. The average detention of 5,690,000 cars as taken from the records of the car service associations was 1.83 days; of which, consignees were responsible for 1.45 days and the railroad companies for .38 of a day, which represents delays in switching yards in making up trains. It would not be unreasonable to expect a railroad company to receive a shipment, transport it 25 miles, and have it ready for delivery at destination, all within 24 hours, and once the train is in motion, the range of delivery might be extended 100 miles for each succeeding 24 hours.

The whole merchandise traffic out of London is delivered throughout England between four o'clock one afternoon and nine o'clock next morning. This is a house-to-house delivery which is performed with such regularity that tradesmen in the provinces do a large part of their ordering by telegraph, and thus avoid keep-

ing much of their capital from lying idle in superfluous stock. How can we maintain that our railroad management is better than that in Great Britain, when we contrast the safety and promptness of the train service in the two countries? As stated above, the fault is not in the plant.

One of the trunk lines advertises a special freight service between New York and Chicago in 60 hours, and for many years another line has accomplished this distance regularly in 53 hours with a train loaded with freight by an express company. A banana train of 31 cars was heralded as making the time from New York to Minneapolis in 63 hours. Yet this was only at an average speed of 20 miles an hour. An official of one of the transcontinental roads stated to the Interstate Commerce Commission that it required 10 days to move freight 250 miles on that road, yet, under the spur of political pressure, he moved two trains of coal of 40 cars each 297 miles in 18 hours.

These facts go to show that the public can secure better freight service, if it be insisted upon. The way to get it is not by investigation of complaints and the finding of a commission enforced by damage suits in the courts. This is but a remedy for individual cases. What is wanted is a preventive in the general interest. This can be accomplished automatically by requiring a provision in the freight receipt that all freight shall be ready for delivery to the consignee within a specified

time after the date of that receipt. For instance, that within 25 miles of the point of shipment, the delivery should be made within 24 hours, and, for each additional distance of a hundred miles, 24 hours should be added for the delivery. To the extent that there was a delay in the delivery there should be a proportionate reduction in the compensation for rendering the service. As this enforcement of a time clause in the contract for carriage is intended to be in the interest of the personal public, it should only apply where shipments were received and delivered at the railroad company's freight stations. Contracts for transportation of freight loaded by the shipper and unloaded by the consignee stand on a different basis, as they are more in the nature of specific transactions into which bargaining may enter, and the general public is only interested in so far as it may be unfavorably affected by the unnecessary detention of cars for the convenience of consignees. This is a grievance to the people generally, as well as to the railroad company. Its magnitude may be measured by a statement attributed to an official of the Pennsylvania Railroad Company, that if the average detention of cars on its lines by consignees could be reduced by one hour, the saving in car service would be equivalent to an addition of ten thousand cars to the equipment of that company.

Opposition to the insertion of a time clause in the ordinary freight receipt will be instigated by the express

companies which have become wealthy and powerful by assuming to ensure the speedy service which the railroad companies are capable of rendering, but decline to undertake. They are encouraged in evading their duty in this respect by the fact that they receive greater net profits from their percentage of the high rates demanded by the express companies than from rendering the same service directly to the public at their ordinary rates. In no other country has the intervention of a third party in the public service rendered by a railroad corporation attained such magnitude. So long as our railroad companies refuse to make the house-to-house delivery, which is part of the ordinary service of the British railway companies, there is here a useful office for the express companies as forwarders, and their invasion of the field before occupied by letters of credit and by postal money-orders with their travellers' checks is an example of the triumph of enterprise over the inertness of bankers and of government bureaucrats. But they should not be permitted by combination with the railroad managements to place an additional burden upon the people in general for the service which the railroad companies, as public servants, rightfully owe them.

In addition to the requirements as to safety and despatch, the railroad corporations as public servants should also perform their duty with a proper regard for the convenience and comfort of those whom they

serve. In the government regulations of this service there has been an increasing attention paid to the requirements as to publicity with respect to rates, and there might be more publicity as to the movement of passenger trains,—not only as to the extent of delays, but as to the probable time of arrival of delayed trains at intermediate stations. Proper arrangements for sanitation, heat, and ventilation of passenger stations and trains is another matter that might be left less to the will or caprice of railroad managements. The proper standard to be set with respect to such matter should be that whatever matter essential to his usual convenience or comfort the average traveller is unable to provide for himself while on a journey, that matter the State should have provided for him by the railroad corporation. This does not apply to the provision of luxuries for commodious ease, as in the trains *de luxe*. Such accommodations are only to be expected where there are travellers in sufficient numbers who are willing to pay the price asked for them. But if it be part of the duty of government to see that cattle are transported comfortably, and that suitable provision is made for them to be fed and watered, surely as much may be asked for such of the sovereign people as may be similarly intrusted to the care of railway corporations.

The necessary requirements as to safety, convenience, and despatch in railroad transportation must vary with the character of the service and primarily with the

speed of trains. The same rules as to movement of trains, train signals, and character of road-bed, road crossings, and equipment, which would be essential in a service conducted at a speed of 60 miles an hour would be unnecessary where a speed of 15 miles per hour was never exceeded. This consideration leads to the suggestion of the classification of railroads according to the character of service which their respective managements voluntarily undertake to render. If a railroad company advertises even a single train at a schedule speed of 50 miles an hour, its line should be suitably equipped, and such service should not be permitted until that fact had been established by independent inspection and publicly announced by the proper officials of the State. Such precautions are urgently required at this very time when there is a growing tendency to utilize the high speed attainable with electricity on roads constructed and equipped for operation by steam.

The ideal road for electric motors should be as straight as possible, sharp curves being more objectionable than heavy gradients. Crossings at track level should be absolutely eliminated; the entire line should be covered at suitable distances with automatic signals, with which every switch should be interlocked. In fact, it is practicable to use switching appliances by which the main line rails remain unbroken, and the possibility of casualties from defective switches would thereby be alto-

gether obviated. Trains at slow speeds making frequent stops should not run on the same tracks with express trains, and this requirement would only permit electric motors on a four-track road. The passenger equipment on such a road should be provided with the best power brakes and with safety vestibule platforms from the tender to the rear car, and should be as far as possible so constructed as not to fly into splinters and be set on fire in case of derailment.

If the roads constructed and equipped for train service at the highest attainable speed were placed in the first class, then roads operated by steam at a speed exceeding thirty miles an hour, and not to exceed sixty miles, should be placed in the second class. Roads of this class should be double-tracked, and operated under the manual block system of signalling. All roads advertising no passenger train schedules over thirty miles an hour should be in the third class. As such roads would be single-tracked, they should be held strictly to the code of train rules recommended by the American Railway Association for use upon single-track roads. All industrial roads would be placed in the fourth class. They should not be permitted to transport passengers, and should be held to the requirements of safety with reference to employees.

The classification of railroads as here briefly outlined, in which the graduation is based upon the requirements as to safety, convenience, and despatch, relative to the

speed of trains, would greatly facilitate the regulation of the public service which they render, and, at the same time, would minimize the interference of government officials in operating details. It is the establishment of standards for the character of the service which each corporation voluntarily undertakes to perform, and it prevents the undertaking of high-speed service by companies which are not prepared to perform it in accordance with the requirements which the public have a right to expect. If the railroad companies were held to such standards by efficient inspection, the executive authority of the State would thereby be beneficially exerted in the general welfare for the prevention of unsafe and objectionable railway operation, as its judicial authority is invoked to penalize the consequences of such operation.

No government regulation, however, will secure to the people the railway service to which they are entitled, which does not include a regulation of the relations between the railroad companies and their employees. However just and reasonable the passenger and freight tariffs may be, however safe and prompt and convenient the service which is rendered, the general welfare of the people as affected by railroad transportation is not adequately secured so long as its regularity may be placed in jeopardy by disputes between the companies and their operatives. This is a matter that passes beyond the limits of privacy between master and

servant in the ordinary occupations of life, and enters into that field of public employment where the obligations of service become assimilated to those assumed by the guardians of the integrity of the State against internal and external attack.

The welfare of the State, even in these respects as well as in the ordinary intercommunication within its borders, is so dependent upon efficient railway service, that the claim upon railway employees for the maintenance of that service assumes the character of an appeal to their loyalty and patriotism similar to that which is made to those who have enlisted for protection of the lives and property of their fellow-citizens. If the refusal to discharge the duties thus undertaken in military service is looked upon as so serious in its possible consequences to the welfare of the State as to be treated as mutinous, even in times of peace, a similar refusal on the part of railway employees should be recognized by themselves as being quite as serious in its effects.

A lockout on the part of a railway management, as a measure to gain its ends in a dispute with its employees, would not be permitted; neither should a strike by its employees to gain their ends be countenanced by the guardians of the public interests. If neither the one nor the other should be permitted, the duty is placed upon the State to provide some other mode of adjusting differences arising in railroad employment. There is no possible way of adjusting differences between indi-

viduals or groups of individuals except by personal conflict or by the intervention of a third party. If two individuals in private life are not permitted to settle their disputes by personal combat, still less should this be allowed to disturb or obstruct the current of social and commercial communication throughout the land. The assumption by either a railroad company or its employees that their disputes should not be involuntarily submitted to the decision of a third party is not valid, for the reason that there is a third party which is vitally interested in the adjustment of such disputes, and that third party is the general public. If that third party sees fit to exercise its sovereign power for the general good in the regulation of the service performed jointly by employer and employee, it may likewise, when it sees fit, exercise that same power for the regulation of the relations between them in the performance of that service.

This is not the place in which to enter upon a discussion of all the considerations involved in the compulsory arbitration of differences between railroad companies and their employees, but certain general propositions may be suggested as premises in such a discussion. If the management may not seek to gain its ends by resorting to a lockout, neither should its employees endeavor to force submission to their demands by threatening to "tie up" the public service by a summary refusal to perform their part of that service.

When such differences arise, there is a proper course of procedure that should be pursued in their adjustment, and the first step in that course is to have the causes of difference clearly stated by common agreement between the particular management and its own employees. If they cannot agree as to terms of settlement, they should submit the matter to voluntary arbitration. If this is not done, the time has arrived for intervention in the interest of the third party to the dispute, the public, by insisting upon compulsory arbitration.

The organization of railroad employees for the furtherance of their own interests has become so thorough and extensive that the public service of transportation in this country is practically conducted under the direction and authority of the chief officials of their brotherhoods. This control they usually exercise discreetly, but the very fact that they possess it overawes the operating managements of the railway companies. This is shown in their very different attitude toward the classes of employees which are organized and toward those which are not. The grievances of unorganized employees are briefly considered and summarily disposed of, one way or another. Not so with those of the organized employees, who are represented by their brotherhood officials, — men usually of more experience in handling affairs of this kind than the railroad officials to whom they are opposed.

The conference begins with the foregone conclusion

that what the brotherhood really wants, it is going to get. No railroad management can hope to do more than to secure a compromise. For that reason the brotherhood officials demand more than they want in order to save the faces of the railroad officials by apparent concessions, but the whole performance is well understood on both sides. The fact is, that no railroad management dare precipitate a strike. The inside history of each strike in the past proves that it has resulted disastrously to the official who represented the railroad company, even when he was successful. Profiting by their experience, their successors now yield to the demands made upon them, and the nauseous pill is sugar-coated as a compromise.

The railroad managements are not to be blamed for this. The great army of railroad employees is thoroughly organized for their own ends and prepared for offensive measures, if necessary to obtain them; while the railroad managements are without organization, even of a defensive character. The labor organizations have the sympathy of the masses, and even their active assistance. The railroad managements have nothing to expect but unfavorable criticism at best, and, in case of actual disturbance of train service, the consequent annoyance and inconvenience to the people in general finds vent in impatient appeals for such an adjustment of the causes of dispute as will most speedily restore orderly communication, never mind whether the terms

of settlement are just or unjust to the railroad company.

The political power of the labor organizations has been shown in recent Federal legislation. Some frightful catastrophes were traced to the negligence of telegraph operators, who, to shield themselves, attributed their misconduct to overwork. At once there was a move in Congress to limit their hours on duty. Such a measure was passed in the Senate and put to sleep in the House. A lobbyist in the interest of the railway brotherhoods went to work, and, within twenty-four hours, there was such a shower of telegrams from thousands of members of the Order of Railway Telegraphers that Senators and Representatives became alarmed, and, even in the closing hours of the session, they rushed the bill through to a final passage, in preference to measures of far greater importance to the general welfare of the country. That which they had feared as a storm of popular indignation was but a cleverly devised bit of lobbying; for the measure was not one in which any general interest had been taken. In fact, the railroad telegraphers themselves only took this step at the command of their brotherhood officials.

If Congress cowers before a demonstration of this kind, how can it be expected that the railroad managements should hold out until they are brought to face it? They have found a way to prevent it by acceding to the demands of the labor organizations in such a manner

that the resulting burdens will be placed upon the people. Whether it be an increase of pay or a decrease of working hours, it is an additional item of expenditure which in the past few years has been telling with increasing emphasis upon the ratio of operating expenses to gross earnings.

In 1903–1904, when this ratio was at its minimum, the railroad companies paid to their employees nearly one-half of their gross earnings. In 1906, six of our railroad systems, and not among the largest, paid out in wages to engineers and switchmen, 12 to 14 per cent more than in the previous year; and this amounted to an increase of $3,500,000 in an expenditure of not quite $26,000,000. In the autumn of last year, the Pennsylvania Railroad Company consented to increases in the wages of employees which will add nearly $9,000,000 to its annual expense account.

It is plain that such general and extensive increases in so large a part of the cost of operation must tend to diminish net revenue, unless gross earnings are proportionately increased. This is thoroughly recognized by the ruling minds in the labor organizations, and they are quite willing to bring the weight of their influence to bear politically in support of measures for a general increase in freight rates, at the very time that the Interstate Commerce Commission is acting on the one hand as a mediator in settling their disputes with railroad companies, and on the other is listening to petitions

for a decrease in rates. Recently there has been a general increase in trunk-line rates of 10 per cent on iron ore and iron and steel products, also of a like amount on grain and grain products, while export grain and flour rates have been advanced from 26 to 28 per cent; so true it is, that you cannot eat your cake and keep it also.

The moral of this labor situation, as it affects the public service of a railroad corporation, is that its employees as well as the company owe a duty in this respect to their fellow-citizens; that their disputes cannot be permitted to affect the public welfare seriously, and, therefore, that there should no more be a railroad strike than a lockout; and that when the two parties to railroad service cannot settle their differences voluntarily, they must expect the third party in interest to interpose its sovereign power; and, finally, that increased pay and decrease in working hours mean increased cost of operation, which the people must expect to be made good by an increase in the compensation to the railroad corporations for the public service which they perform.

But the grievances which have more recently agitated public opinion have not been laid to unjust or unreasonable rates or to inefficient service so much as to the continuing consolidation of rival railway corporations and to the consequent cessation of competition in extensive sections of the country. As a result of this agitation,

public attention has been diverted from the regulations of rates and service to remedies for the abuse of corporate power, and the investigations of the Interstate Commerce Commission in this direction will be the subject of the next lecture.

CHAPTER VIII

THE STANDARD OF RAILWAY SERVICE

In the previous lectures I have discussed the causes of unrestricted competition between railroad companies and of its effects in discrimination between persons and communities; also the efforts which have been made to remedy by legislation the grievances that have resulted from the performance of the public service of common carriers by private corporations. This lecture I propose to devote to the effects of unrestricted competition upon the corporations themselves and to the consequent reaction upon the State.

I have already referred to the condition to which many of these corporations had been brought by unrestricted competition. It had resulted in catastrophe to stockholders and to bondholders. Many millions invested in railway capital had been lost to the investors. Sovereign States and municipalities were responsible as guarantors for the interest and principal of railroad bonds, and were absolutely without security for the repayment of any part of their obligations. The railroads and their equipment were to a great extent unequal to the public service required of them. All

of these calamities had resulted from the senseless warfare of unrestricted competition.

The field of battle was strewn with the bodies of defunct railway companies; for at one time over a fourth of the railway mileage was in the hands of receivers. But as their bodies were not human, but corporate, new life was breathed into them by judicial process. Some of them were dismembered, and their shorn branches were grafted on to healthier stocks; and in the regeneration in what I have termed its Renaissance Period, the American Railway System took on a fresh lease of life, recuperated physically and financially.

George Stephenson, the celebrated English engineer, has been made responsible for the assertion as an axiom that where competition is possible, combination is probable; and this axiom may be emphasized in its application to railway companies, that where unrestricted competition exists between them, consolidation will certainly result. In this country, unrestricted competition had done its best and its worst. On the one hand, it had peopled wildernesses; it had built up great cities in solitudes; it had necessitated a reduction in rates to a minimum before deemed impracticable. That reduction, however, had been attained at great cost to the investors in railroad property and with injury to communities that were not so situated as to be the beneficiaries of natural competition, and had

not been admitted within the zones of artificial competition established by rivalry among railroad managements. Worse than all, it had engendered a public opinion so hostile to those managements that the people would neither listen to arguments in support of their policies nor to appeals for justice in their behalf.

While this cloud of disapprobation was gathering over their heads, the work of reorganization was in progress. Of course, it took the direction of consolidation; at first of separate companies that had been operating connecting links in important lines of communication or of the merger of branch lines with a main line. By consolidation of this kind, great trunk line systems were built up, following natural trade routes and administering to the wholesome development of interstate commerce. The toll-gates which had before stood at each hundred or two hundred miles along these arteries of trade had been removed by consolidation, and the tides of commerce were permitted to flow through them for thousands of miles without obstruction.

These frequent toll-gates had also been the seats of rival toll-gatherers, who bestowed upon their favorites in the way of rebates much of the toll that they collected from the general public. As I stated in a previous lecture, the annual tribute paid in this way by railroad corporations was estimated at anywhere

from $50,000,000 to $100,000,000 per annum. The consolidation which had removed the toll-gates that obstructed the public service had also checked the flow of these millions into the pockets of men who had become wealthy and influential in consequence, and these men were now bitter revilers of the new order of things.

Although the process of consolidation had resulted in a diminution in the number of points of competition between rival corporations, there still remained enough of them to leave an ample field for unrestricted competition to operate disastrously upon their revenues. In 1887, after consolidation had been going on for fully ten years, there were still 2778 junction points out of 33,694 stations; that is, there was unrestricted competition at 8 per cent of these stations, affecting directly by far the greater part of the revenues of the rival companies, while at the other 92 per cent there was no competition at all. At the points of greater commercial importance, rates were still kept down to the cost of the service; if not in the published rates, at least by the evil practice of rebate-giving. These railroads had become the property of men who had put a large amount of fresh money into them to fit them for public service, and they looked for profitable results from the performance of that service. Therefore, in the regeneration of the railroad system of the country, there was a pressure brought to bear upon

the operating managements to agree upon measures that would in some degree restrict competitive discrimination and thereby secure the uniform application of published rates at the points of rivalry among themselves; that is, at the points of artificial competition.

The desire to protect their revenues against the demand for rebates induced the formation of pooling associations, covering sections of the country in which community of action was found to be feasible. The total revenue at each point of artificial competition was divided upon agreed percentages, and, in this way, the weaker competitors were assured a better net revenue from the proportion of traffic allotted to them at the published rates, than if they had competed for all that was offered at rates approximating to the lowest cost of the service. The establishment of pooling associations tended to the maintenance of equal rates open to all shippers, and it was to that extent a measure in support of just and reasonable rates, not only as to discrimination between persons, but also as affecting discrimination between communities.

If this effect of pooling associations could have been rightly comprehended and they had been accepted as a means for the statutory regulation of competition, it is probable that most of the evils now complained of in the corporate control of our railroad system would have been avoided. But it was not to be so.

The wealthy and influential recipients of rebates were thereby deprived of the advantages which they had enjoyed at the expense of less-favored rivals. They agitated opposition to pooling associations in the newspapers and instigated denunciation against them by politicians, until the people generally, who would have been benefited by the pooling associations, demanded their abolition by legislation as stifling competition, — competition that was concentrating the business of the country at junction points and in the hands of favored recipients of rebates.

What the people wanted, they got; though in getting it they were the instruments of an influence that was injurious to their own interests. The legislation intended to preserve competition forbade the pooling of revenues from competitive business, but it was found difficult of application to associations whose ostensible object was the maintenance of published rates. At length, this purpose was also accomplished by resort to a statute intended for a different purpose, the Anti-trust Law, and to the surprise of every one, except a bare majority of the justices of the Supreme Court of the United States, it was decided under certain provisions of that statute that associations of railroad companies to maintain uniform published rates were unlawful combinations in restraint of trade; or, conversely, that it is not to the public interest that all should pay alike for an identical service.

Pooling associations had been done away with, and railroad managers could not lawfully agree upon uniform rates. Railway corporations were condemned by law to reappear as gladiators in the arena of unrestricted competition. The control of their affairs had been taken out of the hands of the operating managements, and it was up to their financial managements to devise some other means for the protection of their net revenues. It was at this point that a plan was quietly formed among the capitalists principally interested in certain important railway properties by which they hoped to secure the maintenance of published rates by what became known as a community of interest; or in language familiar to combinations of laborers formed to restrict competition among themselves, they agreed that an injury to one should be the concern of all. This they sought to accomplish by the exchange between themselves of shares in competing railroad companies, and by each of them having representatives on the boards of directors of all of these companies.

An instance of this kind may be cited in the case of the railroad companies employed in the transportation of bituminous coal to the North Atlantic Coast. The mining of anthracite coal had long been an adjunct of the business of the companies engaged in its transportation, but the bituminous coal consumed on the sea-coast had been principally mined by individuals

along the Baltimore and Ohio Railroad; while the Pennsylvania Railroad served the miners in the Pittsburg region for manufacturing purposes and for transportation to the Ohio River. In 1875, the Pennsylvania Railroad Company entered into competition with the Baltimore and Ohio Railroad Company for supplying steam coal to New York and vicinity, resorting to the recognized method of discrimination in favor of individuals, and with such success that in three years its favored shipper had built up a business of 150,000 tons per annum.

About this time the Chesapeake and Ohio Railroad Company was reorganized, and had gained control of a rival road from the Alleghanies to Richmond. This road was built on the line of a useless canal on a gradually descending grade from the mountains to tide-water, by which the miners could ship their products to the coast so cheaply that they were able to enter into competition with the coal from the Baltimore and Ohio Railroad and the Pennsylvania Railroad. The Norfolk and Western Railroad Company had subsequently emerged from the flood of bankruptcy in a sadly damaged state, but the wreck had been substantially rebuilt. Its line had been extended into the coal region, and had been provided with such excellent sea-coast terminals that transatlantic ships were attracted to Norfolk as a halfway coaling station between European ports and ports on the South At-

lantic Coast and in the Gulf of Mexico. These Virginia coal roads also originated an ocean barge service, which enabled them to compete for New England business.

Meanwhile, after an expensive contest with the Pennsylvania Railroad Company, the New York Central Railroad Company had succeeded in forcing an entrance into the Pennsylvania coal region, by which it secured a valuable traffic to the interior of New York, to Buffalo, and to Lake Ontario. Then there ensued a vigorous rivalry between the miners in the soft coal regions of Pennsylvania, Maryland, and Virginia, in which the railroad companies respectively affected by it were unwilling participants. In this competition everything was forced down to the lowest cost price, wages, freight rates, and commissions, in spite of repeated attempts to arrive at some compromise agreement; and in the long-drawn-out contest, the Virginia miners seriously reduced the profits of their competitors, while bankrupting themselves. A pooling association among the railroad companies was not practicable, since they were not competing for traffic from a region common to them all, but were each striving to protect the traffic from a different region. Then it was that the two great trunk lines, the Pennsylvania Railroad Company and the New York Central Railroad Company, applied the community-of-interest plan to a combination in restraint of com-

petition in the bituminous coal traffic of the Atlantic sea-coast.

These facts came out in an investigation undertaken by the Interstate Commerce Commission in April, 1906, under a joint resolution of Congress. In this investigation it appeared that by mutual understanding the two trunk lines had each of them acquired a sufficient minority interest in the other coal roads, including the Philadelphia and Reading Railway Company, for them jointly to control their operating policies. In February, 1896, they had organized a combination under the title of The Tidewater Bituminous Steam Coal Traffic Association, of which the Coal Traffic Managers of the New York Central, the Philadelphia and Reading, the Pennsylvania, the Baltimore and Ohio, the Chesapeake and Ohio, and the Norfolk and Western companies were directors. The functions of this association were to allot to each line a percentage of the total tonnage and to establish rates of transportation from the mines to points of consumption. This association was maintained, despite the legislative and judicial action in prohibition of pooling associations and of combinations in restraint of trade, for its members neither divided their revenues, nor did any one of them own a majority interest in the stock of any of the other companies in the association.

The control which was exercised through its in-

strumentality over the prices of coal to consumers on the Atlantic Coast was developed in the investigation. In 1899 the rate on coal to New England points was $1.55 per ton, except to Boston and Maine Railroad connections, which were 10 cents less. In 1900 the rate was increased to $1.85 per ton, and all New England was compelled to pay one-fifth more as transportation charges. In September, 1900, the Virginia coal roads proposed to reduce their rates to tide-water to $1.25 per ton, but under a resolution offered by the Pennsylvania Railroad representative at an association meeting, they were required to maintain a rate 12½ per cent higher than the responsible managers of the Virginia roads believed to be a reasonable rate.

The railroad companies were found to be themselves the principal owners of the mines and of all the facilities for distributing to the consumers, directly or indirectly, and their higher officials were also owners of stock in the same auxiliary companies. Individual coal miners asserted that they were restricted in their output by the deprivation of sufficient facilities for transportation, unless they would agree to sell their product to the companies controlled in the railroad interests; while the exactions of tribute by the minor transportation officials, as divulged in this investigation, brought shame upon the railroad managements.

During the course of this inquisition, an opinion

was announced by the United States Supreme Court, in an appeal from an order of the Interstate Commerce Commission by the New York, New Haven, and Hartford Railroad Company and the Chesapeake and Ohio Railroad Company which in effect held that it is contrary to public policy for a carrier to be a dealer in the commodities that it transports. This decision, with the publicity given to the functions of The Tide-water Bituminous Steam Coal Traffic Association, procured a provision in the bill then pending in Congress for the amendment of the Interstate Commerce Act which required that, after May 1, 1908, railroads engaged in interstate traffic should not engage in other business than that of transportation.

Then the directors of the trunk lines saw a great light. They determined to dispose of their corporation interests in coal companies, and the railroad officials perceived that their holding of stock in companies which profited by their management of transportation facilities might be construed as an inducement to favoritism. The distribution of cars among the mines was voluntarily made the subject of conference with the miners, and the officials in charge of this distribution were warned that they must no longer exact tribute for favors. And greatest of all the results from this investigation, the Pennsylvania Railroad Company disposed of part of its interest in the stock of the Baltimore and Ohio Railroad Company

and of the Norfolk and Western Railroad Company; though we have not heard that the directors of the New York Central Railroad Company have followed that example.

The popular desire to preserve the benefits of unrestricted competition to dwellers in certain favored localities and at the same time to hold the railway companies to a strict observance of published rates had brought the public service of transportation into a logical dilemma. If the railway managements associated themselves together to agree upon uniform rates, they were combining in restraint of trade; yet it was only by agreement that they could establish open uniform rates upon competitive business. A strict conformity with the decisions of the Supreme Court required them to go into the market-place, and each one there proclaim his own rate without previous information as to the intention of his rivals. This would certainly have resulted in competitive rates at the lowest cost of the service and in an aggravation of the injury thereby done to non-competitive communities.

In March, 1904, the holdings of shares in the Great Northern and in the Northern Pacific Railroad companies by the Northern Securities Company was forbidden by the United States Supreme Court, and its assets of that character were distributed among its stockholders. Every attempt of the owners of railroad property to maintain competitive rates within reason-

able limits had been frustrated by the courts, and they now resorted perforce to unrestricted competition among themselves for the individual ownership of railway corporations. The field of unrestricted competition was then transferred from the railroad crossings to Wall Street.

The decision in the Northern Securities case was announced three years ago. Let us see what has happened since that may be attributed as an effect of that decision. The amended Railway Rate Law was approved June 29, 1906. Under the provisions of that statute, the Interstate Commerce Commission is endowed with almost plenary powers of investigation, or rather of inquisition, in matters affecting railway capitalization as well as railway traffic; and under congressional resolutions, its powers in that respect have since been put in requisition. Sufficient time has not as yet elapsed for us to be placed in possession of the conclusions from those investigations, but I will use the information that has so far been published to illustrate the progress that has been made in the restriction of competition by individual control of rival railroad companies.

The facts which I shall relate in some detail were brought out in an investigation made by the Commission into the relations of the Union Pacific and the Southern Pacific railroads under a common management. The first of these transcontinental lines was completed in

1869. It was composed of two railroad companies between the Missouri River and San Francisco, the Union Pacific and the Central Pacific, which connected at Ogden in Utah, 880 miles from San Francisco. In 1882, the Southern Pacific Railroad was in operation from San Francisco to New Orleans as a rival route, with a steamship connection thence to New York. After some years of unrestricted competition the owners of the Southern Pacific Railroad bought control of the stock of the Central Pacific Company, which left the Union Pacific without independent connection for its Pacific Coast business, and virtually bankrupted it. The Pacific Mail Steamship Company, operating *via* the Isthmus of Panama, had also been instrumental in reducing rates on Pacific Coast business, without carrying very much of it, and had been brought into a pooling association in which it received 10 per cent of the profits on the competitive traffic, and was shortly afterward purchased by the Southern Pacific Company, which then had the whole transcontinental traffic of California and of Oregon under its control.

Upon the reorganization of the Union Pacific Railroad Company, it procured a connection through Oregon to Portland by the Oregon Short Line and Oregon Railroad and Navigation Company, which gave it a water route from Portland to San Francisco, but it was a secondary line to California, until its control passed into the hands of a few very wealthy men, who

determined to free it from bondage to the Southern Pacific Company, and at the same time to provide a fund for the further aggrandizement of the corporation by buying a controlling interest in other competing railroad property. In March, 1901, the Union Pacific Railroad Company issued $100,000,000 of bonds convertible into the stock of the company, and, from the proceeds, $40,000,000 were devoted to the purchase of $90,000,000 stock of the Southern Pacific Company in the name of the Oregon Short Line, as that subsidiary corporation did not in itself technically compete with the Southern Pacific Company.

In the meantime, J. J. Hill had become a power in transcontinental traffic through the absolute control of the Great Northern Railway Company, and a strong minority interest in the Northern Pacific Railway Company; but he was at a disadvantage in competing for transcontinental traffic, as he had no independent connection into Chicago, and it was almost impracticable to secure suitable terminals there. Undaunted by this apparently insurmountable obstacle to competition, he secured what he wanted by buying the whole property of the Chicago, Burlington, and Quincy Railway Company, — 8000 miles of road with ample terminals in Chicago. For 97 per cent of its stock, being over $107,000,000, double that amount was paid in joint collateral trust bonds of the Great Northern and the Northern Pacific companies. As a counter-stroke,

the Union Pacific directorate, aided by the Vanderbilt interest in the Chicago and Northwestern Railway Company, undertook, by purchasing a majority of the stock of the Northern Pacific Company, to gain control of all that Mr. Hill had been striving for. As the remainder of the $100,000,000 bond issue was not sufficient for that purpose, the fund was increased by an issue of $27,000,000 Oregon Short Line bonds.

In March, 1901, the Union Pacific brokers began to buy Northern Pacific stock at 58, but as soon as Mr. Hill's party got wind of their activity, they also put brokers into the field. A contest ensued in which Northern Pacific stock went up to 1000, and brought on the Wall Street panic of May, 1901. At the end of the campaign, the Union Pacific Company had bought $80,000,000 of Northern Pacific stock, a bare majority of the total issue, and Mr. Harriman was master of the situation. Seats were secured in the directorate of the Northern Pacific Company for representatives of the Union Pacific and of the Chicago and Northwestern companies, but there was an ultimate fusion of the conflicting interests by the incorporation of the Northern Securities Company, thereby controlling 24,000 miles of road; and two men, J. J. Hill and E. H. Harriman, were able to dictate the policy that should govern the traffic over the continent and across the Pacific Ocean. The device for keeping the peace between these formidable rivals was made futile by the decision of the

Supreme Court in the Northern Securities Company case in March, 1904. In the compulsory distribution of the assets of that company, the Union Pacific Company found itself the possessor of a minority interest in the stock of the Great Northern and the Northern Pacific companies, which was valueless for control, and had cost $82,000,000.

Mr. George Gould had hitherto been closely associated in Mr. Harriman's operations. He had, therefore, been contented to rely upon his connection at Ogden with the Southern Pacific and the Oregon Short Line for the business of the Missouri Pacific and the Wabash lines, and for that of his St. Louis and Texas lines by way of El Paso; but the development of Mr. Harriman's plan for control threatened to cut him off completely as a competitor for transcontinental traffic. Senator Clark of Montana, however, providentially undertook the construction of a road over seven hundred miles in length from Salt Lake City to Los Angeles, which would have given the Gould lines an excellent connection to the Pacific Coast. But just as that road was approaching completion, it appeared that the Oregon Short Line had acquired a half interest in it, with a contract to maintain Southern Pacific rates for ninety-nine years; and Mr. Gould has had to enter upon the construction of an independent line into San Francisco.

Incidentally to these grand strategic moves, there was

some by-play affecting the Atchison, Topeka, and Santa Fe Railway Company, whose line had been pushed through to a connection with the Southern Pacific Railroad in southern California in 1881, and had been a feeder to that road for business from St. Louis and Chicago in competition with the Union Pacific Company. After the control of the Central Pacific passed to the Southern Pacific Company, the Atchison Company was without an independent connection for competitive business, and was forced into a reorganization that resulted in the extension of its own line to San Francisco. In 1905 the president of the Atchison Company was informed that Mr. Harriman and his friends, Mr. Frick of the United States Steel Company and Mr. Rogers of the Standard Oil Company, had acquired an interest of $30,000,000 in his company, and that they desired that the two last-named gentlemen should become members of his board. This request was acceded to, but the president of the Atchison Company did not know it when the Union Pacific Company also acquired a little interest of $10,000,000, making in all a control of nearly one-fifth of the capital stock of his company.

In 1905 there was a renewal of the agitation for such an amendment of the Interstate Commerce Act as would prevent the further growth of gigantic railroad consolidations, — an agitation which resulted in the passage on June 29, 1906, of the new law for the regu-

lation of railroad companies. And here was Mr. Harriman with $100,000,000 worth of useless investments in the railroad property of his rival, Mr. Hill. But he was not the man to sit still and be doing nothing. He planned to dispose of these assets, which were of no potential value as means of control, and to invest the proceeds where they would do the most good. By adroit manipulation of the market, these stocks which stood the Union Pacific Company originally in $82,000,000 were carried up to a market value of $147,000,000, and on that basis enough was sold to bring in $116,000,000 cash. In July, Mr. Harriman began to buy stocks. He bought $40,000,000 Baltimore and Ohio, $28,000,000 Illinois Central, $14,000,000 New York Central, $10,000,000 Atchison, Topeka, and Santa Fe, $5,000,000 St. Joseph and Grand Island, $4,000,000 Chicago, Milwaukee, and St. Paul, and $2,000,000 Chicago and Northwestern, — $103,000,000 in all, but at a cost price of $120,000,000.

If you ask how this man could deal in millions of dollars as if they were pennies, the answer is to be found in the method by which he was made sole master of the corporate power of the Union Pacific Railroad Company. In 1902, as president of that company, he was authorized by the board of directors to borrow money for the needs of the company, and to pledge the securities belonging to the corporation as collateral security for such loans. In January, 1905, the by-laws

were amended to give the president "care, supervision, and control of all the company's business under control of the directors and executive committee." The executive committee, which exercised the powers of the board between its meetings, authorized its chairman, who was also the president, to "represent" that committee when it was not in session; and here is one example of the way in which he represented the committee, the board, and the corporation.

By some inside arrangement of which the details were carefully concealed, the Armour Refrigerator Car Company had enjoyed a monopoly of the fruit business out of California. The passage of the Railroad Rate Bill in June, 1906, made it necessary to do away with this monopoly. The president of the Union Pacific Railroad Company informed his executive committee that he had organized a Fruit Express Company with $12,000,000 capital, assigning one-half each to the Union Pacific and to the Southern Pacific companies, and had bought from the Armour Company six thousand cars for $10,200,000. The executive committee voted that the acts of the chairman "be and in all things are hereby ratified and approved."

The same autocratic control of the treasury of a railroad company was more remarkably exhibited in some of the manipulations that preceded the enormous stock purchases of the Union Pacific Company. Prior to 1898, the Chicago and Alton Railroad Company was

capitalized in about $31,000,000 common and preferred stock and $9,000,000 in bonds. In that year Mr. Harriman and three of his friends bought up 97 per cent of the stock at a cost of $42,000,000, paying 200 for the preferred, which received an 8 per cent dividend, and 175 for the common, which was a 7 per cent stock. As Mr. Harriman said of himself and his friends, "We were the Chicago and Alton Railroad Company," and they proceeded accordingly. They first put a 3 per cent mortgage on the road for $40,000,000, and sold $32,000,000 of these bonds to the stockholders themselves for 65. In a month afterward they sold $10,000,000 to the New York Life Insurance Company at 96, and their total profit from this bond transaction was about $8,000,000 to begin with, and from the proceeds that were left in the railroad treasury, they declared a dividend of 30 per cent, or nearly $7,000,000.

About this time they discovered that, in the previous twenty years, the old management had put some $12,000,000 of net earnings into the betterment of the property, and this amount they charged to capital account. Then they sold out their entire interest to one of their clerks, and he sold it to a new company, the Chicago and Alton Railway Company, for $10,000,000 cash, and about $39,000,000 in new common and preferred stock, half and half of each. They also threw in, as a bargain, for $3,000,000 cash, a little

road fifty-three miles in length, which they had bought for less than a million dollars. Mr. Harriman and his friends now owned the new company, but, as the stockholders of that company, they still owed themselves as individuals $13,000,000 on account of the cash payment due them for their interest in the old company and for the little railroad. In order to raise this money, the new company put another mortgage of $22,000,000 on the property at $3\frac{1}{2}$ per cent, which Mr. Harriman and his friends accepted at about 60 per cent in payment of their cash claim. Figuring up these successive profits, it appears that inside of three years, these four gentlemen syndicated $24,000,000 of profits on these several transactions.

All this time, the constitution of the State of Illinois declared that "No railroad corporation shall issue stock or bonds, except for money, labor, or property actually received or applied to the purpose for which such corporation was created; and all stock dividends or other fictitious increase of the capital stock or indebtedness of any such corporation shall be void." Yet the capitalization of this property had been increased from $40,000,000 to $120,000,000 with no visible increase of property except the fifty-three-mile road and some rolling stock. The Chicago, Rock Island, and Pacific Company was then permitted to buy a half interest in the reorganized company, and $10,000,000 of the preferred stock was also sold to the Union Pacific Com-

pany, of which three out of the four gentlemen were directors, at 96, with $2\frac{1}{2}$ per cent commission to the banking house of which one of them was a partner.

One of the most recent investments made by the Union Pacific Railroad Company was the purchase of a one-third interest in the Illinois Central Railroad Company, a corporation with 5700 miles of road, which not only gave the Union Pacific Company a connection into Chicago, but also a line from Chicago to its other transcontinental terminus in New Orleans. The greater part of this interest was acquired by a resolution of the board of directors, of which the presidents of the Chicago and Northwestern, and of the Chicago, Milwaukee, and St. Paul companies, rival lines of the Illinois Central Company, were members. The committee appointed to negotiate for the purchase of this stock found that 105,000 shares could be purchased at 175 from Mr. Harriman and three of his friends, two of whom had found themselves similarly situated with him in the Chicago and Alton affair. It also happened that Mr. Harriman held a controlling interest in a corporation whose only assets were 95,000 shares of Illinois Central stock, which he would consent to sell to the railroad company of which he was president at the same price. In this way the Union Pacific Railroad Company acquired an interest of $28,000,000 in the Illinois Central Railroad Company for nearly $50,000,000, at a profit to Mr. Harri-

man and his friends of about $40 a share, or $8,000,000.

The opportunity for the purchase of $40,000,000 Baltimore and Ohio stock was afforded by the investigation of the Interstate Commerce Commission into the coal traffic combination already mentioned. The publicity given to this monopoly led to a desire on the part of the directors of the Pennsylvania Railroad Company to dispose of part of its interest in the Baltimore and Ohio Railroad Company, and the sale to the Union Pacific Company was effected for $45,000,000 through a mutual friend, the banker who had previously been of such valuable assistance in carrying through the negotiations with himself, Mr. Harriman, and two of their friends for the acquisition of interests in the Chicago and Alton and in the Illinois Central companies.

It is interesting to note the position which the Union Pacific Railroad Company now occupies in the railroad system of the country. It owns two transcontinental lines, — one from Portland, Oregon, to the Missouri River, and another from San Francisco to New Orleans, which with their auxiliary lines make an absolute ownership of nearly 15,000 miles of road. Its interests in the Atchison, Topeka, and Santa Fe road and in the Clark road from Salt Lake City to Los Angeles give it a control besides of nearly 10,000 miles more of transcontinental lines. Its interests in three rival lines from

its terminus at Omaha, including the Illinois Central, add 13,000 miles more, and with the Illinois Central line to New Orleans, it encloses the whole area of the United States west of the Mississippi River and south of the Northern Pacific Railway to the Pacific Coast. It is by far the largest stockholder in two of the trunk lines, the New York Central and the Baltimore and Ohio companies, 16,000 miles more. Nor in considering the dominance of the Union Pacific Railroad Company over the transportation system of our country must we overlook its steamship lines, — its lines from New York to New Orleans and to Galveston, its lines along the Pacific Coast from Panama to San Francisco and Portland, Oregon, and its ocean lines to Japan, China, the Philippines, and Australia.

In a general way, the Union Pacific Railroad Company may be said either to be dominant or powerfully influential in 54,000 miles of railroad, being one-fourth of our total mileage with 40 per cent of its capital and 30 per cent of its earnings. The president of this company wields a power far greater than that of the President of the United States. He is autocrat over the treasury of his company with power to pledge its securities at his will. Within the past year he has bought $182,000,000 of stocks more than he has sold, and has accomplished this by the creation of a fund for speculation through the issue of $145,000,000 of securities and $38,000,000 company notes.

I have not dwelt upon this most recent development in the railway situation for the purpose of arousing animosity against the men who have been foremost in bringing it about. They have been following the dictates of enlightened selfishness under the opportunities afforded for forming these mammoth combinations by legislation which has been both misdirected and defective. Misdirected because it is intended to keep competition alive between railroad companies to such an extent as to reduce rates to the cost of the service, and thereby to give all of the profit to the shipper, even to that degree that the railroad companies cannot lawfully agree upon uniform rates. They have been driven back from one point to another until their principal stockholders have intrenched themselves in the citadel of personal rights in property, — the right of each man to sell that which is his own. In doing this, they have availed themselves of defects in the laws of incorporation which enable them, by mergers and consolidations and by sleight-of-hand performances with stocks and bonds, first to concentrate the small companies into great rival corporations, and then to unify their managements by a common ownership. This has been the result of unrestricted competition as established by law. These men have united to protect their personal interests in combinations which they have been able to create because of the lack of efficient supervision in the public interest over their formation.

Under the latest ideas in rate regulation, the railroad companies are forbidden to change a rate except after thirty days' notice. How can a railroad management be expected to meet the demands of its patrons for immediate relief by a reduction in rates that must be deferred for thirty days? Such a restriction, together with the prohibition of agreement in a change of rates by competing lines, must result in the cessation of rate reduction and in petrifying existing tariffs. The only office then left to the Interstate Commerce Commission in connection with rates will be the determination, not of their relative justice, but of their absolute reasonableness. Here, of what use is it to base the cost of the service upon the value of the private property thereby dedicated to public use, when we see the capitalization of such property raised in one instance by $80,000,000, almost without adding a dollar's worth of visible property, and in another where the property is made the basis of a credit of $160,000,000 for the purpose of stock speculation?

In view of these facts, I insist that the value of the service rendered should be a prominent element in the reasonableness of the charge for a specific transaction, and that the profit thereby arising to the shipper should be equitably shared with the carrier; and further, that the manner in which that service is performed shall be more especially the object of government supervision. When these two things shall have been secured, that is,

a rate reasonable with reference to the efficient service rendered and to its value in specific transactions, then let the jugglers with stocks and bonds be left to thimble-rig with the net earnings of the companies as they please. But with this exception, that it should not be possible, through the intervention of the State, to create corporate monopolies of the production, transportation, and distribution of commodities of prime necessity. When this becomes the object for the exercise of corporate power, it is as much time for the representatives of the people to intervene for their protection as it was for them to interfere in behalf of Cubans and Filipinos against a foreign sovereign power. And if the managers of these corporations undertake to prevent such legislative action by resort to improper methods, it is also time that they should be reminded of the opinion expressed by Lord Coleridge: "All laws must stand upon the foot of the general advantage, for a country belongs to its inhabitants, and in what proportion and by what rules its inhabitants are to own its property must be settled by the law, and the moment a fragment of the people set up rights as inherent in them, and not founded upon the public good, plain absurdities follow, for laws of property are like all other laws, to be changed when the public good requires it. It would be well, indeed, that the owners of property in land or money, from the largest to the smallest, should recognize that their title to the enjoyment of it must rest upon the

same foundation, and that the mode and measure of their enjoyment of the common stock of the State, if it injures the State, can no more be defended and will be no more endured by a free people than any other public mischief or nuisance."

CHAPTER IX

THE PROPER REGULATION OF RAILWAY SERVICE

I have discussed the evolution of the public service performed by railroad corporations, from its incipiency in England to its most recent aspects in our own country. So far as it may seem warranted from the facts which have been called to your attention and by my conclusions from them, I propose to apply these to a consideration of the present relations between the railroad companies, the people, and the federal government, in an effort at least to indicate the means by which these relations may be rendered more harmonious and more conducive to the welfare of those whose interests are therein involved, whether as stockholders, shippers, or travellers, or as citizens of the United States.

We have considered the benefits which have resulted to each of these interests from the introduction of steam railroads as a means of transportation, and the burdens which have been placed upon all of them by injudicious legislation. We have traced the steps by which that legislation has been amended in the light of experience, and we have witnessed the latest exposure of the devices by which escape has been sought from

the irksome yoke of State control of railroad corporations. Let us now reflect upon what we may have gathered with a view to determining the real abuses from which our people are now suffering through the ownership of our railroad system by private corporations and to ascertaining to which causes these abuses are to be attributed. Perhaps in the course of such a survey we may deduce the rudiments of efficient remedies for these abuses.

Of all the abuses presented to us in this review, that which has probably impressed you the most, as it has me, is the spectacle exhibited of the affairs of the Union Pacific Railroad Company. I call it a spectacle, for it is indeed spectacular. When you think of the varied investments of that company in railroad and steamship property, extending over the face of our country from ocean to ocean, along the coasts of those oceans and even across the Pacific to the Far East; when it has been shown to you that the control of these world-wide interests rests absolutely with one man, who of his own volition buys and sells corporate property by the hundred million dollars' worth at a time; when you perceive that the board of directors, whose members are legally and morally responsible for the exercise of the corporate power of that company, has validated the acts of this autocrat in advance of any knowledge of his purposes, or at least any official record of such knowledge, — when you reflect upon these things, you

must consider that all the abuses which can possibly result from the corporate monopoly of a public service are here concentrated, potentially if not actually. It is a matter which overshadows the problems of unjust and unreasonable rates, for it suggests the possible exertion of influences that might insidiously undermine the foundations of legislative and judicial integrity, while all might yet seem fair to the view.

Because we here perceive abuse of corporate powers and privileges, why should we jump at once to the conclusion that the only efficient remedy is State ownership, or in such interference with railroad operations as would be tantamount to State management? There is no necessity for resorting to such a policy merely to secure efficient railroad service at just and reasonable rates, as I hope to show in the course of this lecture. The only warrant, therefore, for State ownership or management has its foundation in the fact that it is impracticable so to control a private corporation in the application of its property to a public service as duly to protect the political rights of our citizens from corporate usurpation.

What do we understand by the protection of our political rights? In my introductory lecture, I stated that every community had a claim upon its members to contribute life and property to the preservation of its entity, for the maintenance of the sovereign power in its integrity. If the integrity of sovereign power be threat-

ened by corporate abuses; if the preservation of the body politic in the full exercise of its legitimate functions be thereby imperilled, — then the State has surely the right, as it has the authority, to resume possession of that exercise of the power of eminent domain which it has delegated to railroad corporations, and to withdraw the franchises which give value to their investments. Still, admitting this extreme view of the case, accepting the proposition as true, though not proven, that only by the resumption of this right and by the withdrawal of these franchises is the public safety to be secured, it has not yet been assumed that the railroad corporations have so abused their powers that they should not only be made liable to exorbitant fines, but also to confiscation of their property.

Therefore the first step in this plan of protecting our liberties from invasion by railroad corporations would be to acquire their property as they acquired their right-of-way, — either by bargain and sale, or by the exercise of the power of eminent domain. Their investments in houses and lands, in equipment and other movable property, might be acquired in either of these ways; but how about their title to that which alone would make this property available for the purposes for which it had been acquired, — the title of the franchises which they hold under charters from the several sovereign States? As a technical problem, I leave this to be solved by the jurists. To a layman, it seems to

involve a web of intricate propositions that would long tax the intelligence and the concurrence of legislators and courts to unravel and to reweave into another tissue in which the threads of State sovereignty would still glitter untarnished.

But there are some practical aspects of federal ownership or management which would have the freshness of novelty to American citizens. As, for instance, the establishment of enclaves of federal sovereignty within the borders of the States. For the tracks and station grounds would become federal property, wherein no State sheriff might intrude to serve a writ or to make an arrest. The whole body of railroad litigation would become transferred to the federal courts or the court of claims, and, as the United States would become a party in each case, there would be an opportunity for raising many new points of law, in which the status of the adverse party might be seriously affected. The labors of theorists in the field of railroad taxation would, however, be greatly lightened when the $14,000,000,000 of railroad investments had become the property of the United States.

The mention of this enormous addition to the public debt should cause the thoughtful mind to reflect upon the effects which would probably follow upon the conversion of the capitalization of these numerous private corporations into a unified public fund. The scheme of conversion itself would be difficult of con-

struction, since it would have to provide for the conversion of common and preferred stocks, of bonds and of equipment trust certificates of widely different values, partly intrinsic and partly speculative, and at varying degrees of preferences and privileges, including interests in auxiliary and incidental enterprises, some of which would be directly in competition with private undertakings. This of itself is a problem that would tax the ability and experience of the acknowledged leaders in the world of high finance; and the atmosphere would be poisoned with rumors and accusations of fraud and corruption in its accomplishment.

Let this conversion be made, and transactions in the stock exchanges would be to that extent limited to dealings in a single class of government securities, with very little fluctuation, ordinarily, in its market price. Instead of there being many minor influences affecting the national and international money markets, some working one way and some another, and on the average tending to a balancing of values in various investments, there would be a general movement in one direction or another that would be affected, not by commercial or economic conditions, but by the anticipation of government policies, whether for war or peace; and it might be in the power of one or more prominent politicians to move the market for their own personal profit.

Nor should we overlook the consequences of the withdrawal of the so-called captains of industry from intelligent exercise of corporate authority and of relegating them to luxurious inactivity, bent solely on personal enjoyment of immense incomes from their investments in government securities. There would result from the State ownership of railways the establishment of a hereditary class of wealthy idlers, measurably protected from the fluctuations of fortune, whose presence would be more pernicious in a democracy than any example hitherto presented in the display of corporate authority.

Perhaps the most interesting feature of federal management, as affecting our political rights, would be that of the changed status of the 1,500,000 railroad employees who would thereby be metamorphosed from private wage-earners into public functionaries. The entire military establishment of the United States is but a corporal's guard in comparison with this army, which would have to be remodelled with a hierarchy of superior and subordinate officials, commissioned and non-commissioned, with all the incidental problems of discipline and etiquette, of enlistment and discharge, of promotion and punishment. Such an administration would necessitate an organization more extensive than that of any existing executive department of the government. How this thoroughly organized army of voters would utilize the political

franchise when they went home to vote, like the department clerks in Washington, affords a field for the exercise of the imagination of the students in politics, as it undoubtedly would for that of the practical minds which control the political machinery of the party in power.

Nor would the American railroad employee look with much favor upon government ownership as it affects the conditions of such employment in European countries. There financial results are sought by low scales of wages, and discipline is enforced in a manner that to our employees would savor of tyranny. Where military service is general, the etiquette and subserviency which has been enforced upon the conscript, he carries with him into his after employment under government authority; the military salute, the stand at attention, passes up from one grade of service to the next, from the guard at the road crossing as the train passes by, from the train employee to the station master, and on up to the inspectors, the division superintendents, etc. But the attention of the train or station employee to the travelling public is another matter, which depends upon the prospective tip. This is due to the policy of the State management, which keeps down the wages of the employees with the expectation that the travelling public will contribute to their support beyond the compensation which each traveller pays for the specific service rendered.

When railroad employment becomes a service ndered to the State government, the relation of the ıployee is altered. He has no choice of employers; cannot pass from the service of one company to at of another. Wherever he goes, there he must ve the same employer, who is also his master. For ese reasons, the recognition of labor organizations nong railway employees is a problem that is greatly sturbing the governments of European States; and is one upon which our railroad brotherhoods should nder well before they give their adhesion to any oject which may tend to altering their present re-tions with railroad corporations.

When we are referred to examples of State owner-ip in Continental Europe, we must consider that e conditions under which the railroad systems of at region have been developed were far different om those which prevailed in Great Britain and in is country, to which I have already referred at such ngth that I need only to mention them here. These nditions have been shown to be so different that e general application of the methods of State man-gement in Continental Europe to our own railway stem would be impracticable. Our whole railway actice would have to be remodelled, and neither e public nor the railway employees would submit the consequences. This conclusion is not so obvious a tourist travelling abroad only by trains *de luxe*,

but any person familiar with the railway service in Great Britain or in the United States must be impressed with this fact when travelling on the local trains and witnessing the manner in which the local service is conducted in Continental Europe.

The people in these European States have been under police supervision for centuries, and for generations compulsory military service has dragooned them into implicit obedience to authority. Therefore they conform without question to all regulations, and under State ownership bureaucracy governs every detail of management, however minute. The stations are placarded with notices which relate much more to what the passenger may not do than to what is to be done for him, and the reluctance to change of existing conditions is emphasized by the appearance of many of these placards, mellowed in color with age. Little attention seems to be paid to keeping trains on time or to the cleanliness of their equipment, except in Germany, but there the American traveller is oppressed by the consciousness on the part of the station or train employee that he is an official to whose orders instant obedience is to be rendered.

There is no question that on the State railways the passenger is not only strictly disciplined, but also sedulously guarded. In this respect we have much to learn, — the American citizen accustomed to looking out for himself, as well as the American railway em-

ployee who expects self-reliance on the part of the travelling public. This regard for safety in railroad service is shown particularly in the station arrangements and in the train protection. Yet in my observations of these matters, desirable as they are, I have seen nothing that could not have been as well secured through an efficient government supervision of railways operated by private companies, as in Great Britain.

It is not fair for a stranger to criticise the freight service of foreign railways, but, if we may judge from the complaints that appear in the local newspapers, the freight service on the Italian State railways must be shamefully inefficient; while the make-up of the freight trains almost everywhere in Europe gives an American expert to understand why the average rate per ton-mile must be higher than with us, for any profit to be derived from traffic so conducted.

There is no argument that can be advanced for the policy of federal ownership of our railway system which might not as logically be applied to any other form of activity in which a charge is made for a specific service rendered by a chartered monopoly. Indeed, it may be applied to the service of production of any staple commodity or of its distribution to consumers. For after all that may be said on the subject, it is a resort to State interference for the adjustment between two members of the community of the character of the

service rendered by the one, and of the compensation paid for that service by the other, whether in a railroad freight or passage rate or the weight and price of a loaf of bread. It is a balancing of the relative benefits to the two parties to the transaction which is at the foundation of all social relations, including the relation between the railroad corporations and the general public.

The more one thinks of converting our vast railroad system, greater than that of all Europe, into a department of the federal government, the more one becomes convinced of the impracticability of such a proposition. The rational remedies for railroad abuses are to be found, not in federal ownership, but in federal supervision of the private corporations that now own and manage the property. The fundamental objection to State ownership of any instrumentality for rendering a specific service to the public is that government control breeds indifference as to the manner in which that service is conducted, and stifles individual energy in its performance.

The success which has attended the application of railroad transportation to the public use is due to individual enterprise. In its origin it was intended for individual benefit. For individual purposes beyond individual means, private capital was concentrated by incorporation. Through such incorporation, individuals were enabled to apply railroad trans-

portation in an improved form to the general good, without their intelligence, energy, or experience being trammelled by external restrictions. The effects of this improved method of transportation were so little foreseen in its incipiency that competition was permitted to degenerate into private warfare, in which the people's wealth was wasted instead of their blood. Yet all this time, the people's government looked on complacently, viewing the expenditure simply as from the railroad treasuries, though every dollar came out of the pocket of some small contributor, either to the capital of the corporations or, as a traveller or shipper, to their revenues. When the warfare assumed such proportions as to involve the interests of non-combatant communities, appeals were made for State regulation, and the State interfered, but how? Why, it said to the railroad companies, you must not make peace; you must fight on. Only, you must fight in the open. You must not secretly use the money obtained from one customer as a gratuity to another.

For years the regulation of railroad transportation, as attempted in the United States either by State or federal legislation, has been in accordance with this policy; and with the result which inevitably ensues upon any continued warfare. In the end, one of the combatants succumbs. Either it makes terms under duress, or it admits that it is bankrupt, and the con-

queror enters into possession of its territory. Here is where the legislation as to corporations has been both misdirected and defective. After insisting upon the "combat à l'outrance," it took no part in the conferences which led to the treaties of peace or to the terms of capitulation, although the people at large were interested in the results as they affected their lives and property.

When the inevitable sequel to unrestricted competition began to loom up in combinations, remedial legislation was applied superficially to the symptoms, rather than internally to the seat of the disease. The eruption was suppressed until the virus has infected the functional activity of the railroad system and begins to threaten our body politic. Popular opinion is being excited upon this broader phase of the railroad problem, as it has been previously concerning the antecedent phases, which were mainly economic. But admitting that there is cause for anxiety as to the continuing growth of corporate power and the extension of its abuse through combination, why should our people become hysterical about it, when they have the strength to control the one and to restrict the other? Why strike wildly at the structural integrity of our railroad system, before we are convinced that there is no other escape from submission to the dictates of those who have gained control of it through our own acts of omission? Why should Samson pull

down the pillars of the temple because the Philistines are revelling in its precincts?

The highest office that the human will performs is when it deters a man from action along the line of least resistance; in the direction toward which he is invited by his appetites, passions, or emotions; and as it is with one man, so it is with the many that make up the body politic. If popular opinion be recklessly or maliciously aroused to such antipathy against corporate power as to sanction legislation which deprives that power of being beneficially exerted for the public good, the people at large will be the sufferers. It is but another aspect of the Æsopean fable of the belly and the other organs of the body.

Let us stop and think over the situation. Let us view our railroad system as it is, with its admitted imperfections, and from what we have learned by experience let us ascertain what these imperfections are and to what extent and by what means they may be remedied. We have in many respects the most important railroad system in the world. There is none other of such magnitude under any other national flag. It is homogeneous as to gauge of track, in the standard features of equipment, and in mode of operation. These desirable results have been brought about by the State governments keeping their hands off during its initial development, and they greatly simplify the functions of federal supervision. As a means of transportation,

our railroad system should perform that service with safety, convenience, and promptness, and that should be the end to be secured in its regulation as a public servant, — just that and no more. How that end is attained should be no concern of the government. Make the corporations penally responsible for results, — its officials, also, if you please, — but leave the means to them. Interference in details will surely lead to confusion, with consequent friction and inefficient service.

Where uniformity in methods or appliances has heretofore been found desirable, that uniformity has been mainly secured through the coördinated action of over two hundred independent operating managements, by their association in an organization which has as yet escaped the destroying hand of the courts under the application of the Anti-trust Law, — the American Railway Association. This association does not exercise the slightest authority over the acts of its members; its conclusions have only the effect of gratuitous recommendations. Yet, through this medium, uniformity has been secured in train schedules, in automatic devices for coupling cars and for power brakes, in standard dimensions of equipment, and in the general introduction of other appliances and processes for intercourse and commerce over the entire 218,000 miles of our railroad system, and over the lines in Canada and Mexico.

After several years of thorough investigation, that

association devised a code of train rules and signals which has been accepted all over this system so completely that a train employee trained in New England may take service in California with confidence in his familiarity with the methods of operation there in use; and I challenge contradiction to the assertion that where that standard code of rules and signals is strictly enforced and honestly obeyed, the horrible catastrophes would be virtually impossible which discredit our train service.

I mention this matter to indicate the practicability of securing all the advantages of unified railroad management and of efficient government supervision, without permitting the further consolidation of railroad corporations and without resorting to State ownership, by taking the American Railway Association into counsel with the Interstate Commerce Commission. That commission could thereby secure the services of the best experts in the country without cost, — experts who would be in position to give the weight of corporate authority to the conclusions that might be jointly reached. But if the commission is to consider questions of operation apart from the railroad managements and to heed only the crude suggestions of irresponsible advisers, it will, in so doing, but confirm previous experience with respect to the misdirection of government regulation.

What I have stated as to the value of taking railroad officials into counsel with respect to the regulation of the

operating departments may well be applied to the regulation of that other department which controls the rates of compensation, which has to do with making tariffs and soliciting business. If the so-called traffic associations were released from the ban of outlawry under which they are now judicially placed, and were free to coöperate with the Interstate Commerce Commission in the determination of just and reasonable rates, then the thousands of joint tariffs which the conditions of the interstate commerce requires might be issued officially by those associations and approved by the commission as valid,—and no others. The conferences at which changes in rates were to be considered would afford an opportunity for the competitive claims of rival communities to be presented by representatives of their chambers of commerce or of leading lines of industry. Here might be found a method for that judicious balancing of the interests of railway corporations, of their patrons, and of the general public, which I believe to be the foundation of just and reasonable compensation to the carrier for rendering a specific service, and accomplished, too, with a minimum of government interference.

There is good reason for restricting the activity of any corporation within the limits of its charter and to the specific objects for which the charter was granted. This is especially advisable when that corporation has been chartered for the performance of a public service

in the nature of a monopoly. If a company has been incorporated to operate a line of railroad between two definite points, then its activity should be restricted to that purpose. It should not be permitted to operate or control, directly or indirectly, any other line of railroad, until that additional privilege had been definitely granted by the sovereign authority to which it owed its existence. This restriction should not preclude a railroad company from becoming interested in enterprises that are incidental or ancillary to the public service which it may be required to perform. For instance, there can be no rational objection to a railroad company owning or becoming interested in the restaurant business at its stations or in undertakings for performing express or telegraph or sleeping-car service over its own lines, or to becoming associated with other railroad companies for the performance of similar service in which they may jointly be interested. This is but an extension of that service for the general welfare, which may likewise be served to better advantage sometimes by a railroad company becoming interested in steamboat or steamship service in connection with its own traffic.

None of these incidental or ancillary enterprises should be undertaken under cover of the railroad charter. They should be organized separately, with public notice as to the extent to which the railroad company is interested in them, and with the same opportunity for the Interstate Commerce Commission to inquire

into the reasonableness or justice of the compensation demanded for those services, as for that to which they are incidental. For such compensation is likewise for the use of private property in a public service; and this should be the test to be applied to any enterprise which a railroad company undertakes, directly or indirectly, wholly or in part, outside of its service of transportation between the points defined in its charter. Is that enterprise incidental or ancillary to the efficient performance of that service, with reference to the safety, convenience, or prompt despatch of the persons or property whose transmission it has contracted to perform? If that be clearly the case, then the company should be permitted to engage in such an enterprise, without special amendment of its charter for such a purpose, subject, however, to the conditions before mentioned, of reasonable publicity and of supervision by the Commission. Under such conditions there could be no shifting of the burdens of these auxiliary enterprises upon the revenues derived directly from the common carrier's charges.

On the other hand, it should be as clearly unlawful for a railroad company to engage in any business other than that of transportation and its affiliations. It might own a coal company to provide itself with fuel, or a forest plantation to supply its timber or steel works for its structural material without a separate organization for that purpose, provided that no part of their products entered into competition for external consump-

tion. But it should not be permitted to own or control by purchase or by loans any interest whatever in any other corporation, except by special amendment to its charter; much less should it be permitted to use its surplus revenues to speculate in the stock market or to mortgage its property for such a purpose.

The further consolidation of existing railroad corporations should only be permitted with specific legislative assent after it had been shown that the public welfare would thereby be subserved. The terms of the merger or amalgamation should be closely defined and their enforcement insured by suitable government supervision. The same remarks apply to the construction of branch lines or extensions under a parent charter. It would sometimes occur that the public benefit claimed for the merger of two connecting railway lines could be as well secured by traffic contracts running for a term of years, and, where this became apparent, such contracts should be preferable to consolidation, as being capable of subsequent modification, should the public interest require it.

Experience has shown that all legislation to restrict corporate activity to legitimate purposes is futile which is not capable of enforcement by penal provisions, penal not only to the corporation, but also as to the central organization of the corporation, its board of directors. Each member of that board should be made to feel the personal responsibility, legal and moral, which attaches

to his office, — a responsibility not to be evaded or delegated. Only let the vigorous measures which have proved so efficacious in the suppression of rebate-giving be applied to the equally illegitimate and far more pernicious abuses of corporate authority, and it will not be necessary to resort to State ownership for their suppression.

If it be said that it would be difficult to secure such supervision of the powers and privileges of railroad companies incorporated by the several States, this is but an acknowledgment of the far greater obstacles to the acquisition by the federal government of the State franchises of these companies. In either case, there would have to be a concurrence of State legislation. When this had been obtained, the constitutional power of Congress over interstate commerce might be as successfully invoked to secure the necessary acquiescence of the railroad corporations as it has been already in the application of federal supervision to their transportation service.

In a previous lecture, I referred to the renaissance period of our railroad system which followed upon its bankruptcy from unrestricted competition, and I associated that period with the introduction of Bessemer steel as a structural material. Again we are approaching a period of railroad regeneration, not brought about by failure through lack of profitable business, but by inadequacy to do the business that is offering. As the

financial reconstruction of our system was furthered by the substitution of steel for iron as a structural material, so will its pending physical reconstitution to meet the increasing demands of commerce be as potently furthered by the substitution of electricity for steam as a motive force.

There is much to be done before that consummation shall have been reached. Out of 218,000 miles of railroad line, not 10 per cent is double-track; the roadway is to be elevated through populous communities and tunnels to be pierced under broad rivers and beneath great cities. All over the country there is a demand for additional freight cars, and the switching yards which must be established at junction points to prevent stagnation of traffic will alone cost millions of dollars. The automatic block signal system which should be a preliminary essential to high-speed train service has as yet been introduced on only a few of our important lines. Not only is there much to be done, but also much that must be undone, if freight is to be moved expeditiously and the efficiency of electricity at high speed is to be secured. Curves must be taken out of the lines, ruling gradients be reduced, and crossings at grade be separated, while thousands of steam locomotives of the most recent type must go to the scrap pile, if they are to be replaced by electric motors. Hundreds of millions of existing investments in road-bed and equipment will have become worthless, if these changes are brought

about, — changes not to gain profit so much as to administer to the public welfare.

No man can now estimate even approximately the vast sum that will be required for this reconstitution of our railroad system. Where is the necessary capital to be obtained? Our so-called multi-millionnaires do not keep their millions in their safes. Their fortunes are already largely invested in the capitalization of this very system. The hundreds, perhaps thousands, of millions that are wanted must come from some other source. They cannot be withdrawn from the bank deposits which are the current assets of commerce and which are represented by checks and drafts, nor from the ready cash which is floating in margins on transactions in stock exchanges. The capital which is to be immovably invested in this great public work must come from the savings of wage-earners and of persons with fixed incomes, already gathered up in savings-banks and in insurance companies. This is at last the foundation-stone in all great financial operations the world over. It is this fund of the humble and the weak, of the husband and father providing for wife and children when they may become widow and orphans, which it is not only the duty of their public guardians to protect, but also to keep it profitably and usefully employed.

Do not then deter the managers of savings-banks and insurance companies from making such use of it by limiting the legitimate profits from corporate in-

vestments, but see to it that the profits are legitimate, and that they are not diverted from the lawful recipients by the unrestricted selfishness of those who exercise the corporate authority. In the regulation of our railroads, the system should be viewed as a whole with reference to its efficient performance of a public service with safety, convenience, and despatch, and for a reasonable compensation. If such results can be accomplished without diminishing the profits from the private capital invested in that system, then the envious attacks upon the wealth derived from such investments should be unheeded by public opinion. If our country is to continue upon its onward march of prosperity, we must keep the paralyzing touch of bureaucracy from interference with the intelligent and honest employment of private capital in corporate undertakings, and particularly in railway enterprises. If our railroad system is not made adequate to the demands upon it by our industrial activity, that activity must itself diminish, and, with its declining energy, there will be fewer opportunities for profitable investment in enterprises dependent upon that mode of transportation for their productiveness.

Our national wealth is largely invested in property which, though productive, is not readily convertible. The world elsewhere is demanding the means to develop unutilized resources of nature, and that wealth which is not attached to the soil may flit away to lands where it

may be more profitably employed. Let us then not legislate *against* the railroads, but for them! Let us regard the ills of which we complain as not inherent in the application of private capital to public use, but as incidental to the unrestricted control of concentrated capital; and let us seek the remedy which will restrict that control to purposes consistent with the public welfare, with powers so clearly defined as to be unmistakable in their limitations, and with such efficient supervision as will insure publicity in the exercise of corporate authority. Surely such a remedy can be found in legislation which will not be so drastic as also to limit the legitimate profits upon private capital invested in the railroad corporations engaged in the performance of a public service.

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